

THE NORTH CENTRAL ASSOCIATION QUARTERLY

Volume VIII

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Number 4

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Volume VIII

APRIL, 1934

Number 4

ASSOCIATION NOTES AND EDITORIAL COMMENTS

THIS is the pre-convention number of the QUARTERLY. As usual, therefore, it contains an outline of the program for the annual meeting which will be held in the Stevens Hotel, Chicago, on Thursday, Friday, and Saturday April 19, 20, 21, 1934. The meeting, it will be noted, has been set for April rather than March. The experiences of last year seem to indicate that this time is, in many ways, very much better than the former one. The weather in April is likely to be more pleasant than in March; the date is somewhat more conveniently removed from the great mid-winter meetings of the N.E.A. than formerly; and the usual spring vacations in schools and colleges will generally be entirely over before April 19th. At any rate the Association has voted to try the later date for one more meeting at least.

As usual the railways will grant reduced rates, obtainable on the certificate plan. All individuals coming to Chicago by railroad should, therefore, secure such credentials. These must be deposited with an agent in the Stevens Hotel on arrival. Further, unless a certain number of certificates are deposited, reduced rates will not be granted.

CORRECTION

Through an error in the records of the Commission on Institutions of

Higher Education, the educational experiment that is being conducted in Kansas City, Missouri, was placed in the Kansas City Junior College. The experiment is being conducted in the Northeast High School of Kansas City.

NEW BASES FOR ACCREDITING

The QUARTERLY carries in this issue an outline of the proposed new bases for accrediting institutions of higher education." More specifically the outline approved by the Committee on Revision of Standards and will be presented to the full Commission at the time of the Annual Meeting in April. Henceforth, if the policies proposed are finally adopted, an institution of higher learning will not be judged solely on the ways it conforms, or fails to conform, to certain more or less isolated criteria but "upon the basis of the total pattern it presents as an institution of higher education." More specifically the outline says: "While institutions will be judged in terms of each of the characteristics noted in this statement of policy it is recognized that wide variations will appear in the degree of excellence attained. It is accepted as a principle of procedure that superiority in some characteristics may be regarded as compensating, to some extent, for deficiencies in other respects."

Surely this is a most significant change in accrediting policy! But surely also it represents sound theory.

ART WORK

A much lengthened period of leisure time for all citizens in America is surely at hand. What, pray, are boys and girls and men and women going to do with it? Certainly no more worthy use can be found for portions of it than to apply it to art work and art culture. But individuals cannot be expected to interest themselves greatly in this way unless they are taught. Up to the present time unfortunately art work in the schools has not been given the place and prominence its values deserve to have it accorded. Clearly the condition must not be permitted to continue. It is therefore a fine service which individuals like Professor Whitford are rendering when they furnish school people advice and guidance in respect to the subject. It is, in consequence, a pleasure for the *QUARTERLY* to publish in this issue a new study pertaining to the matter. The article is entitled "Correct Art Concepts of Tone." It should have wide circulation and to this end reprints of it will be available. These will sell for fifteen cents each, postpaid if cash accompanies the order. Remittances should be made in stamps or otherwise and sent to the Editor of the *QUARTERLY*. Room 1439 U.E.S., Ann Arbor, Michigan.

DATA FROM THE SOUTHLAND

The *High School Quarterly*, the official organ of the Southern Commissions on Accredited Schools and Colleges, has a report in its January issue which should prove of much interest to members of the North Central Association. The report was prepared by Dr. Joseph Roemer, Executive Secretary of the Commission on Secondary Schools and gives data respecting the 1193 second-

ary schools accredited. In 1931-32 these schools enrolled 398,021 high school pupils; of these, 65,383 or 16.4 per cent, were graduated at the end of the school year 1932; and of the latter number 23,163 entered college the following fall. The study further shows the following interesting facts.

1. That 14.7 per cent of the accredited secondary schools are private and enroll 5.3 per cent of all the pupils.

2. That 55.6 per cent of the accredited secondary schools are part of an eleven grade system.

3. That 54.7 per cent of the graduates of the private secondary schools go to college but that only 34.0 per cent of the graduates of the public high schools do so.

4. That approximately one sixth of the accredited secondary schools are small schools, enrolling fewer than 100 pupils and that approximately one half of them enroll fewer than 200 pupils.

5. That the great majority of all secondary school graduates who go on to college attend colleges within their own state (86.4 per cent) while only a small number (4.7 per cent) go to colleges outside the Southern Association territory.

6. That the depression has greatly reduced the number of high school graduates going on to college, the percentage in 1925 being 56.2, while in 1932 it was 35.4.

7. That of the 22,732 pupils who went to college in 1932, 7,717 or 33.9 per cent failed one or more courses during their first semester in college.

8. That over a ten year period the failures from secondary schools organized on an eleven-grade basis were 1.5 per cent greater than the failures from schools organized on a twelve-grade basis.

9. That the total per cent of failures by college freshmen (in semester hours

by years) is as follows: 1922, 12.6 per cent; 1923, 11.4 per cent; 1924, 12.6 per cent; 1925, 13.8 per cent; 1926, 14.0 per cent; 1927, 14.7 per cent; 1928, 14.5 per cent; 1929, 14.8 per cent; 1930, 14.5 per cent; 1932, 13.0 per cent; 1933, 13.0 per cent.

10. That in 1933 the percentage of failures in semester hours by subjects is as follows: English 11.5 per cent, French 13.0, history 12.2, Latin 11.8, mathematics 19.8, science 16.3, Spanish 16.3, other subjects 8.4; total per cent semester hours failed, 13.0.

ANOTHER UNIT ON PHYSICS

Readers will recall that a year or so ago the QUARTERLY carried several studies relating to the subject of Physics. These reports were prepared by Dr. A. W. Hurd and a special committee. Recently Dr. Hurd has added another unit to the last. It is called "Electricity in Communication." It is a logical continuation of the earlier studies listed as "An Experiment in the Use of a Teaching Unit in Science." The new study sells for sixty-three cents and is distributed by the Institute of Experimentation, 433 W. 123 Street, New York City.

THE TERCENTENARY CELEBRATION

All students of Education are familiar with the fact that the first secondary school in America was the Boston Latin School founded in 1635. Next year marks the three hundredth anniversary of that event. It is proposed to celebrate the occasion in a fitting way. To this end the Department of Secondary-School Principals of the N.E.A. has raised a planning committee, charged with the duties of arranging for the event. This committee was appointed four years ago by the then acting chairman of the Department, Milo H. Stuart. It consists of eighteen members, under the chairmanship of Calvin O. Davis.

The Tercentenary Committee has had a number of sessions, the latest one being held in Cleveland on February 25th, 1934. At present fourteen subcommittees are busily engaged in planning for specific phases of the undertaking. These subcommittees, together with the names of the chairmen, are as follows: General Publicity Committee, M. R. Robinson, Editor of *Scholastic*, Pittsburgh, Pa., Chairman; Committee on Historical Studies and Digests, E. D. Grizzell, University of Pennsylvania, Philadelphia, Pa., Chairman; Committee on N.E.A. Pageant, P. J. Campbell, Superintendent of Schools, Boston, Mass., Chairman; Committee on Cooperation and Local Arrangements, J. L. Powers, Boston Latin School, Boston, Mass., Chairman; Committee on Publicity through Educational Magazines, M. R. Robinson, Chairman; Committee on Publicity through General Magazines and the Daily Press, Walter Downey, Principal of English High School, Boston, Mass., Chairman; Committee on Publicity through Radio Broadcasts, T. F. Tyler, Secretary of the National Committee on Education by Radio, Washington, D.C., Chairman; Committee on Publicity through Parent-Teachers Associations, Merle Prunty, Superintendent of Public Schools, Tulsa, Okla., Chairman; Committee on Publicity through State Educational Associations, E. T. Cameron, Secretary of the Michigan Educational Association, Lansing, Michigan, Chairman; Committee on Publicity through Service Clubs, L. L. Forsythe, Principal of Ann Arbor High School, Ann Arbor, Michigan, Chairman; Committee on High School Pageants, H. C. Lyseth, Department of Public Instruction, Augusta, Maine, Chairman; Committee on High School Commencement Exercises, W. W. Haggard, Superintendent of Schools, Joliet, Ill., Chairman; Committee on Essay

Contests and High School Assemblies, L. W. Brooks, Superintendent of Schools, Wichita, Kansas, Chairman.

The object of the celebration is to bring fully to the attention of the American public the place, purpose and significance of secondary education—particularly of public secondary education. Certainly if democracy is to survive in America an educated constituency must be had—a constituency that is trained to deal effectively with the great political, social and economic problems that beset modern peoples. Nothing short of a full elementary and secondary school training for all normal youths of the land will assure this; and this training must be made vital and functional far beyond the stage in which it has too often been found in the past. The Tercentenary Celebration is expected to operate in a fashion to help produce these changes.

Since many individuals connected officially with the celebration program are connected with the North Central Association, it seems proper to announce the activities of the planning committee here. More details will follow in other issues of the *QUARTERLY*.

MORE PRAISE

The Association's book entitled *High School Curriculum Reorganization* continues to elicit approval from reviewers and publishers generally. It also is finding favor with college professors and others who are using it as a textbook for

courses in Education. Thus, for example, Professor Franzen of Indiana writes, "It may interest you to know that fifty copies of the new book are being used by students in my two curriculum classes, one on the campus and one in an extension course in Evansville. I also plan to use it during the summer."

The *Loyola Educational Digest* in an extended review closes its paragraphs as follows: "The volume . . . presents practical applications of . . . principles to the subjects included in the secondary school curriculum. The committee has made a genuine contribution in this field of education and all interested in secondary education should study its report and recommendations."

Readers of the *QUARTERLY* will be interested also in the reviews which appeared in the October issue of the *School Review* and the October issue of *Educational Administration and Supervision*. The first of these two reviews includes the following paragraph:

Every group at work on the revision of high-school offerings should have this book for study, not because of the subject matter which it suggests for different high-school courses, but because of the value of the illustrations showing how it is possible to analyze objectives to the point where they can function as guides by which to select course content. The committee has successfully demonstrated that analysis techniques are usable in curriculum revision. There still remain the tasks of developing and refining analysis techniques and of developing and refining an experimental technique by which to test the courses when once constructed according to analysis techniques.

PROGRAM OF ANNUAL MEETING

STEVENS HOTEL, CHICAGO

April 19-21, 1934

THURSDAY, APRIL 19

- Morning*
9:00-12:00 Meeting of the Commission on Institutions of Higher Education with the Commission on Secondary Schools. (Program to be provided by the Commission on Institutions of Higher Education and consisting primarily of a report on standards to be followed by a discussion of standards.)
Meeting of the Commission on Unit Courses and Curricula.
- Afternoon*
2:00-5:00 Meeting of the Commission on Institutions of Higher Education. (The Committee on the Revision of Standards will have charge of the program.)
Meeting of the Commission on Secondary Schools.
Meeting of the Commission on Unit Courses and Curricula.
- Evening*
6:00 Dinner Conference of administrative heads of high schools with the Commission on Secondary Schools. (This conference directly follows the annual informal dinner of the administrative heads of high schools.)

FRIDAY, APRIL 20

- Morning*
9:00-12:00 Meeting of the Commission on Institutions of Higher Education. (Report of the Board of Review, the Secretary's Report, Reports on the Experiments, and the Report of the Committee on Athletics.)
Meeting of the Commission on Secondary Schools.
Meeting of the Commission on Unit Courses and Curricula.
- Afternoon*
2:00-5:00 First General Session of the Association. (The program will be provided by the Commission on Unit Courses and Curricula.)
- Evening*
6:00- Second General Session of the Association—the Annual Banquet of the Association.
Meeting of the Executive Committee. (This meeting will be held directly following the banquet—held primarily for hearing appeals from institutions of higher education.)

SATURDAY, APRIL 21

- Morning*
9:00-12:00 Third General Session of the Association. (The program will be provided by the Commission on Institutions of Higher Education.)
Address. Speaker to be provided by the Association.
- Afternoon*
2:00-4:00 Fourth General Session of the Association. (The program will be provided by the Commission on Secondary Schools.)
Address. Speaker to be provided by the Association.
Meeting of the Executive Committee. (Directly following the General Session.)

MILO H. STUART

THE strength of an organization like the North Central Association is found in the individual representatives of the institutions composing its membership, who are able and willing to give time, thought, and action to the service of the organization continuously over a long period of years. Such splendid service is usually so quietly rendered the membership at large is not fully aware of it until something happens to break the continuity of such a long-continued fine influence. The truth of this statement becomes evident when death vacates the place in North Central affairs of such a man, and causes consideration of what has been his contribution to the Association. When it is necessary to consider this question, whether it be in the case of a Hollister, a Babcock, an Effinger, a Thomas Lloyd Jones, a Childs, or a Milo Stuart, the inquiry always brings the same answer. Belief in the fundamental principles of the organization, knowledge of the effectiveness of its procedures, willingness to spend time, thought, and energy in the promotion of its beneficent influence, together with tact, acumen, foresight, and courage in forwarding the work of the Association, make up the answer.

An appraisal of the work and influence of Milo Stuart in the North Central Association gives us the latest evidence of the devotion of a man to the principles and work of our great organization. He was a member of the Association from 1908 until his death in July, 1933, a span of twenty-five years. In 1915 he was a member of a Committee to revise the constitution. He was treasurer from 1914 to 1922. He was a member of the executive committee from 1913 to 1924. He

was president in 1922-23. Again he was a member of the executive committee in 1926-27. In 1926 he presented a report on reclassification procedure in Indianapolis. In 1929 at the annual meeting, he presented an address on plans to encourage and recognize exceptional teachers in the schools of the North Central Association. Such is a mere outline of dates and topics in connection with Milo Stuart's activities in the Association. Back of these, however, lie much more important things, typical of the personality and character of the man. One member of our Association, whose active membership has been longer than that of Milo Stuart, and, who therefore, is in a position to speak of his personal work in the Association, pays tribute to the insight and effectiveness of Mr. Stuart, which brought about his contribution of an outstanding permanent policy to the Association. Let me quote the statement.

In an organization composed of institutions, it is not often that an individual is able to contribute an outstanding permanent policy to its administration. Principal Milo H. Stuart became treasurer of the North Central Association in March 1914. The report of the treasurer at that time showed a membership of 25 universities, 37 colleges, 70 secondary schools, and 61 individuals. The cash in the treasury was \$296.06. He felt the insecurity of the financial status of the organization, and began a campaign to bring into membership the large group of accredited institutions that had not come to realize the advantages of membership, which would bring them fully into the activities and proceedings of the Association. In spite of the trying days of the war period, when it was necessary for one year to omit the call for reports from the institutions, he increased the membership year by year. In 1920 he was able to report that all but 62 of the accredited secondary schools had voluntarily entered into membership. In 1922, when he retired from the office of treasurer to become

president of the Association, his report showed a membership of 1592 institutions and 44 individuals, with a cash balance of \$4852.24.

At the time of the war, there was a period when he was practically the sole officer of the Association. In this position, with his graciousness, tact and firmness, and his knowledge of North Central Association procedure, he kept things going in a most remarkable fashion. So quietly and unassuming was his management of the affairs of the Association in these troubled days, no suggestion of his assuming the role of dictator ever arose. Another who had been intimately associated with Milo Stuart in affairs of the Association said,

Mr. Stuart was unusually valuable as a member of a committee. He was interested in securing the full truth about a situation, and he brought to the interpretation of facts a very broad and sympathetic interest. It is my opinion that Mr. Stuart was either named on more committees or proposed for membership on more committees than any man in the Association during the period of his active work. This is a real tribute to the success with which he served.

The officers with whom he was associated as member of the executive committee, had great respect for his knowledge of North Central procedures and of the current trends in secondary education. His judgment was therefore highly respected and frequently sought. In those periods when he was not a member of the executive committee, hardly a year passed that his judgment and advice were not asked by the officers and

members of this committee as they dealt with the problems coming before the committee for solution.

In his death the Association has lost a willing worker, excellent in judgment and valuable in counsel, who contributed much to the effectiveness of our Association during the years in which he has been associated with it. Perhaps his spirit toward the work of the organization is well summed up in this comment made by President Gage.

"When Milo Stuart gave up the treasurership a special study was assigned to him. I remember that when that study was completed he came to me and said with some regret—'Now at last I have nothing to do for the North Central'. His whole attitude indicated that he had great affection for the Association and had been glad through many years to give to it loyal and efficient, and at some times, burdensome service."

When the honor roll of this Association, from the days of the leaders in education who founded it to the present, is prepared, an honored place must be given to Milo Stuart, that quiet, unobtrusive effective man, who because of his firm belief in the principles of the North Central Association and his appreciation of the fellowship of the individuals active in its service, gave freely and without stint of his talents to promote through the Association the cause of secondary education throughout our territory.

E. H. K. McCOMB

NOTES ON THE NEW ENGLAND ASSOCIATION MEETING

Two distinct impressions stand out vividly in the mind of one who attended the meeting of the New England Association of Colleges and Secondary Schools held at Boston in mid-December. The first impression was the absence of the elaborate accrediting machinery for secondary and higher institutions which marks the North Central Association and the emphasis upon informal discussion and upon renewing old and making new "acquaintance". The second was the concentration this year upon problems dealing with the articulation of secondary school and college, such as the general organization, courses, records to be submitted, and final placement of the individual. In connection with these discussions the principal address was given by Dean Chauncey S. Boucher of the University of Chicago and the monographs on the National Survey of Secondary Education came prominently into the discussion.

The absence of the accrediting machinery with which we are so familiar in the North Central is accounted for by the fact that the accrediting, of secondary schools at least, is done by a separate body, The New England College Entrance Certificate Board. Naturally the relationship is close and this certificate board is made up of representatives from each of the three committees of the regional association, namely, the committees on Institutions of Higher Education, Private Secondary Schools, and Public Secondary Schools. When a school applies to this board for accrediting, the records of its graduates in the colleges are investigated, and if such records are found to be satisfactory the school receives the stamp of approval

and is placed upon the accredited list.

At the luncheon of the representatives of the public secondary schools, the national survey came into the picture at once with a presentation by Roy O. Billett, specialist in school administration in the United States Office of Education. He discussed specifically the different types of organization from the conventional 8-4 to the latest 6-4-4 and pointed out the need for more cooperation for the sake of the student in passing from one institution to another.

The meeting of the delegates from private secondary schools was led by Headmaster W. L. W. Field of Milton Academy. As everyone knows, the private schools are exceedingly strong, both in numbers and in prestige, in the New England area, and they have one of the three standing committees of the association. In their discussion the question of standards was raised and it was characteristic of the spirit which seemed to pervade all the sessions that Mr. Field emphasized lack of any need for private schools to set up a rival code to that of the public schools. He reported that the executive committee approved in principle the public school code on professional training which is the requirement of the state departments of education, or is required by law, but could see no reason why the private school committee should adopt such a standard as compulsory for their own members. It was quite evident that in all classes of institutions, private and public, secondary and higher, the principle of local self-government prevails in the New England area.

At the one business session of the Association, recommendations of each

of three committees for new members among colleges, private and public schools, were adopted by acclamation and Dr. O. E. Randall, former Dean of Brown University, was elected as president for the ensuing year to succeed William Ellery Wing of Portland, Maine. The development of examinations in all the foreign languages, that will serve as *placement* examinations rather than as tests on a specified number of units, was the significant part of the report made by Professor Brigham of Princeton upon the work of the College Entrance Examination Board. In fact, the point was raised again and again in various meetings that the so-called "Carnegie units" had served their purpose and should now be superseded by some measure that reckons quality as well as quantity with less emphasis on time.

Dean Boucher's address on "Certain Implications in Present Day Experiments in the Relations between School and College" centered around the studies in Monographs 5 and 10 of the National Survey covering the reorganization of secondary education and the articulation of high school and college, and very admirably brought to a head, points in regard to organization, certificates, reports and curricula, which had featured the discussions in each of the three committees of the Association. The lack of relationship between the college offering and the methods of admission, the absence of guidance which still marks much educational work at both the secondary and the higher levels, experiments with the different types of organizations in the secondary school and in the junior college, the development of testing programs and curriculum revision, were ably presented in the discussion leading to his

conclusions that there will be greater cooperation between the secondary school and the college for the achievement of their ends; that the organization in the 6-4-4 form is likely to become common; that not a single examination or report but rather a cumulative record of the individual presenting a genuine case history, will be the means of determining admission to college; that the means of admission will demonstrate achievement rather than time spent; that different types of colleges suited to the ability and achievement of different types of students, will evolve from the present institutions; and finally that the student will assume more responsibility for his own education.

At the dinner, which corresponds very closely to the North Central dinner, President Wing, in his best vein, announcing as his theme, "the selective process of choosing college presidents," wittily and happily presented for brief talks three new college presidents, one new headmaster, and the fraternal delegate from the North Central. The three new college presidents were James B. Conant of Harvard, Hugh F. Baker, Massachusetts State College, Bancroft Beatley of Simmons College, and the new headmaster was Claude M. Fuess of Phillips Andover Academy.

Cooperating with the New England Association, and holding sessions immediately after, were other organizations, including the New England Junior College Council, the Eastern Massachusetts group of the New England Modern Language Association, the New England Association of Chemistry Teachers, and the Association of Teachers of Mathematics in New England.

F. L. HUNT

REPORT OF A FRATERNAL DELEGATE

THE trip to Atlantic City as a fraternal delegate from the North Central Association to the Middle States Association was one of the most enjoyable it has ever been my privilege to make. The renewing of acquaintance with former colleagues, the making of new acquaintances in the meetings and in hotel lobbies, as well as the opportunity to sit on the side-lines and observe others handling the business were all interesting, enjoyable and decidedly profitable.

The Association of the Middle States handles much of its routine work prior to the general meetings. The Chairman of the Commission on Secondary Schools is also the Chairman of each State Committee. He holds meetings of the state committees in each of the states for the consideration of reports from schools to be accredited. In some of the states the meetings last for as long as two days. If this same policy prevailed in the North Central Association the Chairman of the Commission on Secondary Schools would have opportunity to do considerable traveling and to see a large portion of the United States. Of the 4600 secondary schools accredited by regional associations in the country more than 2400 of them are in the territory of the North Central Association of Colleges and Secondary Schools. The Association of the Middle States has 600.

The report of the Chairman of the Commission on Secondary Schools on the proposed study of standards by all of the regional associations was given careful consideration. Widespread, thoughtful interest was manifested in

the plan presented. After general discussion the proposal was given unanimous approval by the Association. This included an appropriation each year for the next three years to assist in carrying on the study. (See June, 1933, issue of the NORTH CENTRAL ASSOCIATION QUARTERLY, page 108, "Committees Authorized." Also, *School Life*, October, 1933, pages 34 and 35, on "Plans of Regional Associations to Find an Up-to-date Answer to the Question, What is a Good High School?")

With the bulk of the routine business out of the way before the Association meets, with but little more than approval to be given by the general Association to the work of the two commissions, it is possible to have interesting, general programs. One of the very interesting addresses was that given by M. Auguste V. Descolos, Assistant Director, Office National des Universités et Ecoles Françaises, on "French Examinations, their Doctrine and Practice." The Friday evening dinner was a formal occasion in so far as dress was concerned, and a decidedly informal occasion in fellowship and general acquaintance. Dr. Frank J. Loesch, President of the Crime Commission of Chicago, gave a challenging address on "Education and Our Social Problems" which was based largely on information concerning the crime situation in Chicago. These and other thought provoking addresses when taken with the informal discussions which took place even at the Friday evening dinner made the trip very much worth while.

GEORGE E. CARROTHERS

PROPOSED NEW BASIS FOR THE ACCREDITING OF HIGHER INSTITUTIONS

THE following statement has been approved by the Committee on Revision of Standards to be presented to the Commission on Institutions of Higher Education at the annual meeting of the Association as the basis for the future accrediting of all types of higher institutions.

STATEMENT OF POLICY RELATIVE TO THE ACCREDITING OF INSTITUTIONS OF HIGHER EDUCATION

This statement of policy defines certain principles that will be followed in accrediting institutions of higher education. It is stated in general terms and includes brief descriptions of those characteristics of an institution that will be examined as a basis of accreditation.

This statement of policy is supplemented by a manual which contains elaborations of the statements here given and detailed directions for the execution of the policy here set forth. Upon each important issue the manual contains specific directions for the collection of information and such norms and criteria as will make possible a fair and intelligent evaluation of an institution.

I. MEMBERSHIP

The North Central Association of Colleges and Secondary Schools will accredit and admit to membership as an institution of higher education a university, college, junior college, or institution of similar character that is judged to be of acceptable quality in matters later defined in this statement of principles. In the interpretation of this policy the liberty to integrate the whole or a part of a secondary school with a higher institution will be permitted.

Eligibility for membership will be based upon the character of an institution as a whole, including all the units within its organization. In the case of

units, such as professional schools, that fall within the areas of other accrediting agencies the actions of such accrediting agencies will be taken into account; but the Association does not bind itself to accept the judgment of these agencies.

II. PURPOSES OF ACCREDITING

The purposes of the Association in accrediting higher institutions are as follows:

1. To describe the characteristics of institutions worthy of public recognition as institutions of higher education.

2. To guide prospective students in the choice of an institution of higher education that will meet their needs.

3. To serve individual institutions as a guide in interinstitutional relationships, such as the transfer of students, the conduct of intercollegiate student activities, the placement of college graduates, and the selection of college faculties.

4. To assist secondary schools in the selection of teachers and in advising students as to a choice of institutions, and to promote in any other ways the coordination of secondary and higher education.

5. To stimulate through its accrediting practices the improvement of higher education in the territory of the North Central Association.

III. BASES OF ACCREDITING

An institution will be judged for accreditation upon the basis of the total pattern it presents as an institution of higher education. While institutions will

be judged in terms of each of the characteristics noted in this statement of policy, it is recognized that wide variations will appear in the degree of excellence attained. It is accepted as a principle of procedure that superiority in some characteristic may be regarded as compensating, to some extent, for deficiencies in other respects. The facilities and activities of an institution will be judged in terms of the purposes it seeks to serve.

IV. ELIGIBLE INSTITUTIONS

To be considered by the Association an institution must be legally authorized to confer collegiate degrees, or to offer a definitely described portion of a curriculum leading to such a degree, or to offer specialized curriculums leading to an academic certificate. An approved institution is not barred from offering curriculums terminating at the end of one, two, or three years if they are taught at the level of collegiate instruction. The curriculum should presuppose the completion of a secondary-school curriculum as a condition for entrance to the institution, or secondary courses should be so integrated with the curriculum of the institution itself as to guarantee the educational progress of students to a definite stage of advancement beyond the completion of the usual secondary-school offering. Before an institution will be considered for accreditation, it must have been in operation long enough to make possible an evaluation of its program.

V. INDIVIDUALITY OF INSTITUTIONS

In its accrediting procedures the Association intends, within the general patterns of higher education, to observe such principles as will preserve whatever desirable individual qualities member institutions may have. While it is

necessary to emphasize certain characteristics that are recognized as basic, such as the competence of the faculty, the representative character of the curriculum, effective administration, standards of student accomplishment, and financial adequacy, it is regarded as of prime importance also to protect such institutional variations as appear to be educationally sound. Even in these basic matters it is clear that considerable divergence from average or optimum conditions may occur without perceptibly detracting from the essential educational worth of an institution. Uniformity in every detail of institutional policies and practices is believed to be not only unnecessary, but undesirable. Well conceived experiments aimed to improve educational processes are considered essential to the growth of higher institutions and will be encouraged.

VI. INSTITUTIONAL PURPOSES AND CLIENTELE

Recognition will be given to the fact that the purposes of higher education are varied and that a particular institution may devote itself to a limited group of objectives and ignore others, except that no institution will be accredited that does not offer minimal facilities for general education, or require the completion of general education for admission.

Every institution that applies for accreditation will offer a definition of its purposes that will include the following items:

1. A statement of its objectives, if any, in general education.
2. A statement of the occupational objectives, if any, for which it offers training.
3. A statement of its objectives in individual development of students, including health and physical competence.

This statement of purposes must be accompanied by a statement of the

institution's clientele showing the geographical area, the governmental unit, or the religious groups from which it draws students and from which financial support is derived.

The facilities and activities of an institution will be judged in terms of the purposes it seeks to serve.

VII. FACULTY

An institution should have a competent faculty, organized for effective service, and working under satisfactory conditions.

In determining the competence of the faculty, consideration will be given to the amount and kind of education that the individual members have received, to their experience in educational work, and to their scholarship as evidenced by scholarly publications and contact with learned societies. Attention will be given to the faculty requirements implied by the purposes of the institution. The educational qualifications of faculties in colleges of similar type will be considered in judging the competence of a faculty.

Under faculty organization consideration will be given to the number of the faculty in ratio to the number of students, to representation of the teaching fields, to the training of instructors in their fields of instruction, to group organization of the faculty, to faculty meetings, and to faculty committees.

Under satisfactory working conditions consideration will be given to the following: salary status; tenure; instructional load; recruiting, selection, and appointment; aids to faculty growth; and provisions for leaves of absence, retirement, insurance, housing, and recreation and community life.

VIII. CURRICULUM

The curriculum of an institution should contain the subject-matter offer-

ings implied by its statement of objectives. In general these offerings include provisions for general education, advanced courses when the purposes of an institution require such offerings, and special courses appropriate to the specific objectives which the institution claims as among its functions.

An institution should provide appropriate facilities for general education unless, as may be the case in a particular institution, its program presupposes the completion of general education prior to entrance.

The organization of the curriculum should be such as will best serve students of the type whose admission is implied by the declared purposes of the institution. Responsibility for the grouping of curriculum content, as by courses, departments, or divisions, will lie with institutions. The merit of a curriculum organization will be judged primarily by the manner in which it functions.

The curriculum of an institution will be regarded as effective only when the faculty includes instructors competent by reason of educational preparation to offer instruction in announced courses.

The institution should be able to show clearly that the curriculum as described in published statements is effectively administered in the case of individual students and that there is reasonable adherence to stated requirements in the awarding of degrees and certificates of progress.

IX. INSTRUCTION

An institution will be expected to show a sympathetic concern for the quality of instruction offered students and to give evidence of efforts to make instruction effective. Consideration will be given to the emphasis placed by the institution upon teaching competence in the selection and promotion of teachers,

to the manner in which young instructors are inducted into teaching activities, to the aids that are provided as stimuli to the growth of individual members of the staff, to the institution's concern for high scholarship in students, to its emphasis upon the adjustment of the curriculum and teaching procedures to the abilities and interests of students, to efforts to make such examinations as are given more reliable and more accurate measures of student accomplishment, and to the alertness of the faculty to the instructional needs of students. Familiarity of the administration and faculty with current discussions of instructional problems at the college level and with recent experimental studies of college problems are further evidences of institutional alertness to the need for good college teaching.

X. LIBRARY

The library should provide the reading facilities needed to make the educational program effective, and there should be evidence that such facilities are appropriately used.

In estimating the adequacy of the library, attention will be given to the holdings of standard works of general and special reference, to the holdings of magazines and periodicals, and to the number and variety of books. The use of the library by students and by the faculty, library expenditures over a period of years, the salaries of the library staff, the qualifications of the staff, and the administrative practices relating to the library will all be considered in this connection.

XI. INDUCTION OF STUDENTS

The policy of an institution in admitting students should be determined on the one hand by the purposes of the institution and on the other by the abilities, interests, and previous preparation

of applicants. An institution should admit only those students whose educational interests are in harmony with the purposes of the institution and whose abilities and previous preparation qualify them to pursue the studies to which they are admitted.

In evaluating the practices of an institution in the induction of students, attention will be given to the provision for preregistration guidance in cooperation with secondary schools, to the criteria used in the selection of students, to the administration of the stated entrance requirements, and to the arrangements for introducing new students to the life and work of the institution.

XII. STUDENT PERSONNEL SERVICE

The student personnel service of an institution should assist students to analyze and understand their problems and to adjust themselves to the life and work of the institution.

Consideration will be given to the means employed by an institution to assist students in the selection of courses and curriculums, in solving immediate academic problems, in furthering their scholastic development, and in making suitable vocational choices and preparation. Attention will also be given to the practices of an institution in counseling students about their health, their financial affairs, and their intimate personal affairs. The student's relation to extracurricular activities will also be studied. The practices of an institution in the provision and control of health services, in the housing and boarding of students, in the management of extracurricular activities, in the control of student conduct, and in financial assistance to students will be considered.

XIII. ADMINISTRATION

The administrative organization should be suitable for accomplishing the

objectives of the institution. Adequate provision should be made for the performance of all administrative functions by a personnel competent in their respective lines of activity.

In evaluating the administration of an institution, the emphasis will be placed upon the manner in which the functions are performed rather than upon the organization or the personnel, although the suitability of the organization and the competence of the personnel cannot be ignored. Attention will be given to such matters as the constitution and activities of the board of control; the general system of administrative control; the administration of academic matters, such as curriculum, faculty personnel, and instruction; the business administration, including financial accounting, budgeting, purchasing, the collection of revenues, and the supervision of the finances of student activities; the administration of the physical plant; the management of invested funds, if any; the administration of the student personnel service; the administration of special educational activities, if any, such as summer session or extension services; and the system of records and reports.

XIV. FINANCE

The institution should provide evidence of financial resources adequate for and effectively applied to the support of its educational program.

The items of information to be considered in determining the adequacy of the financial support are the expenditure per student for educational purposes; the extent to which the institution is dependent upon student fees; the stability of the financing, as indicated by the amount of income per student from stable sources, and the avoidance of burdensome indebtedness; and the procedures in financial account-

ing and reporting. Necessary adjustments will be allowed for contributed services of instructors and administrative officers in Catholic institutions.

XV. PHYSICAL PLANT

The physical plant, which comprises the grounds, buildings, and equipment, should be adequate for the efficient conduct of the educational program and should contribute effectively to the realization of the accepted objectives of the institution.

In judging the plant, consideration will be given to the adequacy and effectiveness of such features as site; general type of buildings; service systems; classrooms, laboratories, and other facilities appropriate to the special purposes of the institution; office facilities; library building; facilities for health service, recreation, and athletics; dormitories; auditoriums; assembly rooms; and the operation and care of the plant.

XVI. INTERCOLLEGIATE ATHLETICS

If the institution maintains a program of intercollegiate athletics, the same policies should prevail in regard to faculty, administration, and the management of students as are in force in connection with the other features of the institution.

In evaluating the athletic program, consideration will be given to the requirements for eligibility for participation; the distribution of scholarships, loan funds, grants of financial aid, and remunerative employment; the methods taken to safeguard the health of participants; the administrative organization; the financial control; and the competence of the staff.

XVII. INSTITUTION'S STUDY OF ITS PROBLEMS

An institution should continuously study its policies and procedures with

a view to their improvement and should provide evidence that such useful studies are regularly made.

Consideration will be given to the means used by the institution in the investigation of its own problems, to the nature of the problems selected for study, to the staff making studies, to the methods employed, to the attitude of the administration toward and the support given to such studies, and to the manner in which the results are made available to the faculty, the administrative staff, and the interested clientele. It is recognized that such studies may be of many sorts, ranging from small inquiries of immediate service value to elaborately conducted experimental investigations. They may deal with any phase of the work of an institution, such as administration, curriculum, student personnel service, instruction, or any other matter of immediate or remote concern to the institution. An institution will be requested to provide typed or printed copies of complete studies.

XVIII. PUBLISHED LIST OF ACCREDITED INSTITUTIONS

The Association will publish one list of accredited institutions of higher education. Attached to the name of each institution in the list will be notations relative to such objective facts as are pertinent to a description of the characteristics of an institution.

XIX. CONTINUING REVISION OF POLICY AND PROCEDURES

The effect of this program of accrediting upon the welfare of institutions is the vital matter in its formulation and adoption. Continuous study leading to adjustment and improvement is accepted as necessary to the full fruitage of the plan and will be considered an integral part of the regular accrediting activities of the Association. It shall be the policy of the Commission to study the operation of the principles given in this statement of policy and of the detailed procedures described in the manual.

In pursuit of this policy there will be collected periodically from member institutions such information as will contribute to the procedures of accrediting and will reveal the changing character of these institutions. It shall be the duty of the Secretary, with the counsel of the Board of Review, to conduct annually one or more detailed studies upon selected phases of the accrediting program. The study of any given year will include only a limited number of institutional characteristics, but they should be so chosen as to make it possible from time to time to determine improved procedures and criteria for the use of inspectors and the Board of Review. The results of such studies will be regularly reported to the Commission on Institutions of Higher Education.

PERIODICALS FOR THE COLLEGE LIBRARY

THE following list of titles¹ has been prepared from a much longer list developed by Dr. Eugene Hilton of Berkeley, California.

Dr. Hilton's work is noteworthy in several respects. In the first place, he secured judgments concerning the current periodicals most valuable to their departments from groups of instructors carefully selected to represent each of the twenty-six departments most generally found in American institutions of higher education. Next he had the same jury indicate the relative importance of *each* periodical for *each* of four different purposes. The results are highly important in that they suggest to the college librarian (a) the number of different departments having use for the same periodical, (b) the variety of uses it serves in each department, and (c) the instructors' sense of its relative importance among those useful to the given department. Dr. Hilton has reduced the departmental ratings to a single index number by which the appropriate titles are separately ranked for each department.

The present article is a compromise between publication of the Hilton study in full, for which funds have not been found as yet, and the selection of too few titles to benefit the libraries of any but the smallest institutions. The list has been reduced considerably; first by omitting the titles with low index numbers (except where the ratings for some *one* purpose are high), and second, by a telescoping scheme of classification which almost eliminates the repetition

of titles that belong in two or more departmental lists. It is expected that an article describing Dr. Hilton's methods of constructing his list will be published in a forthcoming issue of the *Library Quarterly*.

In the list here presented, five numbers are shown in connection with each title. The first is the index number which shows its relative position among all the periodicals said by the instructors to concern the given subject. The remaining four numbers show the number of instructors who find the given periodical useful for each of the four different purposes, respectively. The purposes are:

- a. To supply research material for advanced students and faculty,
- b. To keep instructors informed of developments in their fields,
- c. To supply reading collateral to students' courses, and
- d. To supply students' general reading apart from assignments.

The scheme of classification begins with a list of fifty-six periodicals used by so many departments and considered by them so important as to justify separate listing. These constitute the "general list." Next comes a list of titles reported useful to two or more "divisions"—i.e., the humanities, physical sciences, biological sciences, and social sciences. This list is called "inter-divisional." The next list includes titles within the humanities division that are useful to two or more departments. This list is called "inter-departmental." Then follow the separate lists for each of the departments. The same scheme is applied to the other divisions in turn.

Some of the periodicals here listed are no longer published. Such have been retained because the existing volumes are reported highly useful.

¹Prepared for the Committee on Revision of Standards for Institutions of Higher Education, by the library subcommittee, Douglas Waples, University of Chicago, Chairman.

I. GENERAL

Title of Periodical	Total of Percentage Indices in All Subjects Shown
Academy of political science, New York. Proceedings	108
American academy of political and social science, Philadelphia	
Annals	231
American association of university professors. Bulletin	144
American economic review	135
American historical review	117
American journal of philology	123
American journal of physiology	106
American journal of psychology	127
American journal of science	114
American journal of sociology	147
American labor legislation review	105
American political science review	141
American review (N.Y.) (Formerly Bookman)	128
American review of reviews (Superseded by Review of re- views and World's work)	126
Art and archaeology	104
Atlantic monthly	239
Biological abstracts	125
Book review digest	122
Christian century	125
Congressional record	106
Cumulative book index	100
Current history	214
Foreign affairs; an American quarterly review	137
Forum and century	106
Harpers monthly magazine	135
Hygeia. Chicago	116
Illustration. (Paris)	105
Journal of educational psychology	103
League of nations news	111
Literary digest	158
Modern language association of America. Publications	209
Modern language journal	225
Modern language notes	211
Modern language review	132
Modern philology	168
Nation	141
National geographic magazine	123
New republic	202
New York times (Sunday)	157
Political science quarterly	139
Readers' digest	126
Readers' guide to periodical literature—Cumulated	376
Revue des deux mondes	112
Romantic review	104
Saturday review of literature. (New York)	114
School and society	137
School science and mathematics	151
Science	236
Science news-letter	139
Scientific monthly	164
Scribner's magazine	126
Social science abstracts	147
Survey	129
World peace foundation, Boston. Publications	104
World's work (Superseded by Review of reviews and World's Work)	127
Yale review	153

II. INTER-DIVISIONAL

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
American review of reviews. (Now Review of reviews and World's Work)	History	31	6	17	13	23
	Pol. Science	22	4	9	9	12
	Speech	21	1	4	3	6
Arts and decoration. (N.Y.)	Art	21	5	9	5	9
	Home Ec.	29	—	6	9	6
Atlantic monthly	English	64	4	22	27	49
	History	28	6	14	12	27
	Literature	27	2	4	7	12
	Religion	15	4	9	6	11
Christian century	Pol. Science	15	2	8	5	11
	Religion	53	2	21	19	23
	Soc. Science	15	1	6	5	11
Current history	History	68	23	34	33	37
	Pol. Science	54	11	26	18	23
	Soc. Science	16	3	7	9	6
	Speech	26	8	6	7	8
Federal council of the churches of Christ in America. Dept. of re- search and education. Information service	Religion	16	2	9	7	11
	Soc. Science	20	7	11	10	7
Forum and century	English	26	—	5	8	28
	Pol. Science	13	1	6	3	11
Harper's monthly magazine	History	18	5	9	9	19
	Home Ec.	16	—	2	1	5
	Literature	25	—	—	5	10
	Pol. Science	24	2	9	8	16
House beautiful	Art	20	3	5	4	10
	Home Ec.	45	1	12	12	10
Journal of abnormal and social psy- chology	Psychology	38	21	25	22	10
	Soc. Science	16	9	11	11	6
Journal of social psychology	Psychology	26	14	22	18	8
	Soc. Science	22	11	13	12	5
Literary digest	English	23	—	6	6	25
	History	27	3	13	10	18
	Pol. Science	26	3	10	10	17
	Speech	26	5	5	7	11
Living age	English	17	2	7	6	25
	History	18	4	11	7	21
	Pol. Science	16	3	7	6	13
Mental hygiene (Concord, N.H.)	Psychology	24	11	19	15	8
	Soc. Science	18	11	16	12	9
Nation	English	21	—	2	6	22
	History	26	3	10	7	19
	Pol. Science	24	3	10	8	14
	Soc. Science	21	3	8	7	15
New Republic	Economics	18	2	10	12	15
	English	24	—	7	7	27
	History	23	2	10	6	19
	Pol. Science	41	5	15	12	20
	Soc. Science	28	5	11	13	17
	Speech	19	3	5	4	9

Inter-departmental (*Continued*)

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
New York times (Sunday)	English *	20	2	15	9	20
	History	26	5	11	5	13
	Pol. Science	27	5	12	4	14
Readers' digest	English	24	6	17	6	18
	Pol. Science	11	3	5	4	7
Readers' guide to periodical litera- ture—Cumulated	Education	31	15	11	7	4
	English	53	24	16	7	3
	French	15	4	5	2	1
	History	34	18	11	10	8
	Home Ec.	25	2	3	2	2
	Literature	23	4	3	—	—
	Pol. Science	36	15	8	9	5
	Psychology	16	5	5	3	6
	Religion	18	5	4	5	2
	Soc. Science	18	5	5	4	4
	Spanish	16	4	5	1	2
	Speech	33	10	3	3	3
Science (N.Y.)	Biology	30	9	17	11	14
	Botany	30	9	10	8	9
	Chemistry	37	8	25	19	22
	Geology	22	9	9	3	1
	Physics	45	11	29	17	27
	Zoology	28	5	11	7	10
Scribner's magazine	English	32	1	9	10	32
	Literature	17	—	1	2	7
	Pol. Science	15	—	6	4	11
	Speech	20	2	6	—	6
World tomorrow	Religion	17	2	9	7	11
	Soc. Science	20	5	11	10	14
World's work (Superseded by Re- view of reviews and World's Work)	English	10	—	3	2	14
	History	23	4	10	9	13
	Pol. Science	17	5	7	6	14
	Speech	17	4	4	5	8
Yale review	English	32	9	18	13	21
	History	20	3	8	8	13
	Literature	15	2	1	3	6
	Pol. Science	22	4	11	10	16
American journal of philology	Classics	60	22	29	8	10
	English	18	30	18	4	—
	Literature	15	4	4	2	—
American journal of psychology	Philosophy	18	3	6	4	1
	Psychology	62	22	23	29	15
American literature	English	34	13	23	10	13
	Literature	29	6	8	8	7
American philological association. Transactions and proceedings	English	15	15	15	—	—
	Classics	42	17	24	10	7
American speech	English	17	12	20	9	2
	Speech	23	3	10	7	12
Art and archeology	Art	34	14	16	14	16
	Classics	42	10	25	18	21

Inter-departmental (Continued)

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
Book review digest	English	29	6	22	5	20
	Literature	23	2	5	1	6
Books abroad (Oklahoma. Univer- sity)	French	16	2	10	1	3
	German	19	—	10	1	1
	Spanish	19	3	9	2	4
Cumulative book index	English	15	6	4	—	—
	Literature	17	—	1	2	7
Drama (Chicago)	English	21	3	17	9	26
	Speech	34	7	14	10	10
Englische studien	English	23	23	17	2	—
	Literature	21	7	9	2	—
English Journal	English	58	16	39	18	10
	Literature	19	2	9	3	3
Giornale storico della letteratura italiana	Spanish	15	7	8	1	1
	French	13	10	8	2	1
Hibbert journal	Philosophy	30	5	13	9	10
	Religion	41	7	23	14	14
Hispania	French	22	3	12	4	5
	Spanish	64	6	23	8	13
International journal of ethics	Philosophy	40	8	17	12	9
	Religion	17	4	12	7	9
International studio	Home Ec.	16	—	3	3	2
	Art	28	5	11	9	11
Journal of English and Germanic philology	English	34	23	19	5	—
	German	18	10	11	4	2
	Literature	16	4	5	2	—
Journal of religion	Religion	45	12	24	17	11
	Philosophy	20	4	10	5	6
Literaturblatt für germanische und romanische philologie	German	16	12	17	2	1
	Spanish	21	10	11	—	—
	French	14	10	12	—	—
Modern language association of America. Publications	English	48	28	29	13	2
	French	39	13	26	8	7
	German	27	8	18	5	4
	Literature	23	9	7	4	—
	Spanish	57	15	21	7	8
Modern language forum	French	27	5	20	11	5
	German	28	3	16	3	5
	Spanish	27	5	14	3	5
Modern language journal	English	26	20	21	7	1
	French	63	7	28	20	9
	German	41	4	22	7	5
	Spanish	72	7	23	7	10
Modern language notes	English	42	33	30	10	—
	French	48	15	25	10	8
	German	33	7	14	6	4
	Literature	22	7	7	4	—
	Spanish	58	15	19	5	6

Inter-departmental (*Continued*)

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
Modern language review (Cambridge, Eng.)	English	22	16	21	7	—
	French	33	11	23	10	6
	German	20	5	16	5	3
	Spanish	37	11	18	4	9
Modern languages (London)	German	28	2	14	3	2
	Spanish	29	5	14	3	5
Modern philology	English	39	29	24	9	—
	French	30	11	18	5	4
	German	28	9	11	4	1
	Literature	25	7	7	4	—
	Spanish	37	12	11	1	3
Notes and queries (London)	English	17	15	12	3	4
	Literature	17	3	4	—	1
Philological quarterly	Classics	21	11	10	2	5
	English	23	16	10	5	—
	Spanish	20	10	8	1	3
Philologische wochenschrift	Classics	17	6	12	—	1
	German	7	12	13	1	1
Poet-lore	English	29	4	16	11	33
	Literature	16	—	3	3	8
Poetry	English	37	14	17	13	34
	Literature	18	—	5	2	9
Review of English studies	English	34	22	26	6	4
	Literature	25	7	7	1	—
Revue de philologie (Paris)	French	15	14	14	4	1
	Classics	13	9	11	2	—
Revue des deux mondes	French	48	10	20	16	23
	Spanish	24	4	9	2	6
Revue hispanique	French	15	5	9	2	2
	Spanish	55	18	16	2	4
Romantic review	French	34	14	18	6	5
	Spanish	49	14	20	4	6
Saturday review of literature (N.Y.)	English	46	8	28	14	28
	Literature	29	2	6	3	9
Studies in philology (North Caro- lina. University. Philological club)	English	28	24	19	1	6
	Literature	16	5	3	1	—
	Classics	12	8	5	2	5
Theatre arts monthly	English	17	3	8	5	20
	Speech	30	7	10	11	10
Times, London. Literary supplement	English	32	11	25	9	24
	Literature	21	—	8	2	6
Zeitschrift für romanische philologie	French	15	13	11	2	1
	Spanish	20	13	9	1	1

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
<i>Art</i>						
American magazine of art		31	4	11	5	9
Architectural record		18	4	6	4	5
Art bulletin		29	7	12	6	8
Art digest		31	5	12	4	8
Art et décoration (Paris		14	2	10	4	7
Art in America and elsewhere		16	5	5	5	5
Art news		18	2	9	2	6
Arts weekly (Formerly Arts)		23	4	12	5	10
Chicago art institute. Bulletin		13	5	10	2	3
Creative art		30	7	11	11	13
New York. Metropolitan museum of art. Bulletin		17	5	12	4	5
School arts magazine		20	1	4	2	2
Studio (London)		17	4	10	5	9
<i>Classics</i>						
American journal of archaeology		43	14	18	8	8
Classical journal (Chicago)		80	14	32	19	18
Classical philology		72	25	25	16	10
Classical quarterly (London)		54	20	28	16	14
Classical review		63	19	32	12	15
Classical weekly		68	9	32	12	11
Hermes (Berlin)		13	12	14	5	4
Jahresbericht über die fortschritte der klassischen altertumswissenschaft		27	16	15	2	—
Journal of Hellenic studies		38	14	23	9	7
Journal of Roman studies		32	14	17	7	7
Latin notes		40	3	22	6	8
Philologus		18	17	15	5	4
Rheinisches museum für philologie		15	13	14	6	3
<i>English</i>						
American mercury (N.Y.)		20	—	6	6	30
American review (Formerly Bookman)		53	7	26	18	41
Anglia		24	22	18	2	—
Correct english, how to use it		17	4	14	9	13
Edinburgh review, or critical journal		14	4	10	6	20
London mercury		10	2	4	1	20
New York herald tribune books		16	1	12	5	14
North American review		13	2	3	7	19
Sewanee review		16	8	14	10	14
Shakespeare association of America. Bulletin		17	13	20	4	4
<i>French</i>						
Bibliographie de la France		22	13	11	—	1
French quarterly		17	3	18	3	4
French review		37	4	21	12	9
Illustration (Paris)		45	2	20	22	30
Je sais tout		11	—	6	7	17
Larousse mensuel illustré		22	—	9	11	18
Lectures pour tous		15	—	4	12	18
Mercure de France		26	5	18	10	18
Nouvelle revue française		21	11	13	9	13
Nouvelles littéraires, artistiques et scientifiques		25	6	23	8	15
Petit journal (in French)		18	—	5	6	8
Quinzaine critique (Paris)		16	4	13	2	3

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
Revue critique d'histoire et de littérature		25	13	16	4	7
Revue d'histoire littéraire de la France		27	15	22	5	6
Revue du seizième siècle		13	14	9	3	4
Société des anciens textes français, Paris. Bulletin		17	10	10	3	2
<i>German</i>						
Archiv für das studium der neuen sprachen und literaturen		14	10	16	2	—
Deutsche echo		17	2	3	9	10
Deutsche literaturzeitung		16	5	20	1	6
German quarterly		26	4	15	7	3
Germanic review		28	10	16	6	3
Illustrierte zeitung		21	1	8	8	17
Jahresbericht über die erscheinungen auf dem gebiete der germanischen philologie		16	11	14	1	1
Language dissertations		6	10	8	—	1
Literarisches zentralblatt für Deutschland		17	5	15	2	5
Literatur; monatsschrift für literaturfreunde		19	5	13	2	5
Monatshefte für deutschen unterricht		37	2	16	4	1
Velhagen und Klasing's monatshefte		18	1	6	7	9
Westermanns monatshefte		17	2	8	9	11
<i>Music</i>						
Diapason		32	3	8	5	8
Etude (Philadelphia)		35	4	7	6	13
Modern music		23	6	9	4	4
Music and letters (London)		18	4	5	4	4
Music and youth (London)		15	1	4	2	5
Music supervisors' journal		50	1	12	5	5
Musical America		49	3	14	5	15
Musical courier		33	—	11	4	12
Musical digest		32	1	10	3	8
Musical observer		24	—	5	1	8
Musical opinion and music trade review		15	2	6	2	7
Musical quarterly		57	9	11	11	13
Musician		22	1	10	3	11
New music review and Church music review		22	2	6	4	8
Public school music bulletin		25	—	10	2	5
Revue musicale		11	3	5	2	4
School music		29	2	8	5	8
<i>Philosophy</i>						
American philosophical society, Philadelphia. Proceedings		26	7	16	7	5
Archiv für geschichte der philosophie		11	11	12	2	2
Journal of philosophy		68	18	27	23	13
Mind (London)		30	13	13	12	4
Monist		22	6	11	8	6
Philosophical review		60	14	23	16	11
Philosophy		34	15	20	13	7
Revue de métaphysique et de morale		9	10	11	2	3
Revue philosophique de la France et de l'étranger		10	12	11	3	3
<i>Psychology</i>						
American journal of psychiatry		18	13	19	10	7
Archiv für die gesamte psychologie		13	15	14	3	5

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
Archives of psychology		27	28	25	13	8
British journal of psychology		25	20	24	18	11
Comparative psychology monographs		26	20	24	16	7
Genetic psychology monographs		30	19	21	16	5
Human factor (Formerly National institute of industrial psychology, London. Journal)		13	7	14	8	6
Journal psychologie normale et pathologique		10	12	14	3	6
Journal of applied psychology		50	21	28	34	12
Journal of comparative psychology		31	18	22	20	8
Journal educational psychology		53	24	31	30	12
Journal of educational research		23	14	13	13	6
Journal of experimental psychology		52	27	34	27	12
Personnel journal		23	12	16	14	6
Psychological abstracts		51	25	29	20	10
Psychological bulletin		55	23	30	22	11
Psychological clinic		35	17	26	19	8
Psychological index		43	24	27	16	5
Psychological monographs		40	27	27	23	6
Psychological review		55	11	13	8	6
<i>Religion</i>						
Biblical review (N.Y.)		21	3	15	10	7
Bibliotheca sacra		11	3	14	4	4
Christian education (N.Y.)		28	—	15	8	12
Harvard theological review		21	4	17	4	10
International journal of religious education		34	2	17	16	16
International review of missions		27	7	13	12	11
Journal of Biblical literature		27	11	19	14	5
Missionary review of the world		25	3	14	6	16
Religious education		44	8	21	17	15
<i>Spanish</i>						
Bibliografía general española e hispanoamericana		26	10	13	—	—
Blanco y Negro		28	1	6	9	18
Bulletin hispanique (Annales de la Faculté des lettres de Bordeaux)		16	10	12	—	—
Bulletin of Spanish studies		42	11	19	8	6
Esfera		32	1	9	8	14
Gaceta literaria		19	4	7	3	7
Nosotros		15	1	10	5	12
Nuevo mundo		14	—	8	6	9
Pan-American magazine		16	—	6	4	7
Pan-American union. Bulletin. (English)		17	6	4	7	—
R. Academia española, Madrid. Boletín		22	8	12	3	2
Revista de Filología española		47	20	16	1	1
Revista de la Facultad de letras y ciencias		17	7	11	1	3
Revista de las Españas		14	2	15	4	11
Revue de littérature comparée		16	9	9	1	—
<i>Speech</i>						
Debaters' Digest		27	6	6	10	5
Journal of expression		27	5	9	5	7
Quarterly journal of speech		45	14	23	12	12
Stage. (N.Y.) (Formerly Theatre guild magazine)		15	3	7	4	8
Theatre magazine		25	4	12	6	9

III. PHYSICAL SCIENCES

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
<i>Interdepartmental</i>						
Academie des sciences.	Chemistry	31	27	21	9	3
Comptes-rendus	Mathematics	17	17	13	2	2
	Physics	27	26	27	9	8
American journal of science	Chemistry	16	15	23	9	15
	Geology	55	14	16	10	5
Bureau of standards journal of re- search	Physics	30	22	21	11	4
	Chemistry	14	15	14	6	3
Journal of mathematics and physics	Mathematics	17	12	24	5	8
	Physics	14	8	16	8	12
London, Edinburgh and Dublin phil- osophical magazine and journal of science (Lindon)	Physics	29	21	15	11	5
	Chemistry	12	11	8	3	2
Physical review	Chemistry	16	12	12	5	4
	Physics	66	38	34	26	10
Popular science	Physics	15	1	—	5	18
	Chemistry	13	1	6	7	16
School science and mathematics	Chemistry	15	1	8	5	8
	Education	24	8	23	21	14
	Mathematics	52	6	22	15	26
	Physics	32	4	16	13	20
Science news-letter	Botany	21	1	5	4	7
	Chemistry	27	1	18	10	15
Scientific American	Physics	41	2	19	12	24
	Chemistry	18	3	12	10	14
Scientific monthly (N.Y.)	Physics	24	2	8	10	20
	Geology	16	1	4	2	2
	Physics	28	3	15	14	25
<i>Chemistry</i>						
American electrochemistry society. Bulletin		28	21	29	17	8
Analyst (London)		17	13	12	6	2
Angewandte chemie (Formerly Zeitschrift für angewandte chemie)		24	30	17	10	3
Annales de chimie		26	37	25	11	6
American chemical society. Journal		90	42	43	39	18
Association of official agricultural chemists. Journal		20	11	13	12	7
Biochemical journal		31	31	27	19	8
Biochemische zeitschriften		19	25	18	13	3
British chemical abstracts		27	29	20	5	5
Cereal chemistry		16	12	17	12	12
Chemical abstracts		24	13	7	1	—
Chemical and metallurgical engineering		67	22	36	33	26
Chemical markets		12	2	17	6	11
Chemical news and journal of industrial science		38	16	25	12	14
Chemical reviews		71	34	39	27	16
Chemical society, London. Journal		56	56	33	19	6
Chemiker-zeitung		15	17	19	14	9
Chemische industrie (1921+ published also as part of Zeitschrift für angewandte chemie)		11	12	12	2	2
Chemisches zentralblatt		38	35	25	9	6
Chimie en industrie		21	16	23	17	10
Deutsche chemische gesellschaft, Berlin. Berichte		53	35	36	22	8
Helvetica chimica acta (Schweizerische chemische gesellschaft)		16	21	14	8	5

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
Industrial and engineering chemistry		80	32	40	42	30
Journal de chimie physique et Revue générale des colloïdes		19	30	21	10	4
Journal für praktische chemie		23	25	21	8	4
Journal of biological chemistry. Chem.		36	33	32	23	12
Journal of chemical education		86	10	42	38	35
Journal of physical chemistry		72	40	38	30	11
<i>Physics</i>						
Bell laboratories record		27	14	23	9	18
Bell system technical journal		35	20	34	15	14
Electronics		23	11	21	14	15
Franklin institute, Philadelphia. Journal		18	14	19	9	9
Institute of radio engineers, New York. Proceedings		21	16	17	11	5
Journal de physique et Le Radium		25	25	30	13	6
Journal of scientific instruments		19	13	15	8	3
National academy of sciences, Washington. Proceedings		21	14	16	7	7
National research council. Bulletin		19	10	10	5	4
Nature (London)		34	18	20	15	20
Optical society of America. Journal		35	19	20	13	7
Physical society of London. Proceedings		32	23	23	11	6
Physikalische zeitschrift, Leipzig		32	29	25	11	7
Reviews of modern physics		54	27	32	20	17
Review of scientific instruments		30	14	22	8	9
Royal Society of London. Proceedings. Physics		12	15	13	7	5
Science abstracts: A. Physics		57	32	28	12	5
Zeitschrift für den physikalischen und chemischen unterricht		12	8	11	3	3
Zeitschrift für physik. (Deutsche physikalische gesellschaft)		34	27	20	8	6
Zeitschrift für technische physik		11	11	15	11	8
<i>Geology</i>						
American association of petroleum geologists. Bulletin		65	13	16	15	6
American Geographical Society of America. Bulletin. (Now Geographical review)		41	8	9	8	5
American mineralogist		44	11	10	8	2
American naturalist		15	1	3	3	3
Annotated bibliography of economic geology		40	9	6	2	1
Canadian institute of mining and metallurgy. Transactions		15	5	5	4	1
Canadian mining journal		16	5	7	6	2
Cushman laboratory for forminiferal research, Sharon, Mass. Contributions		19	8	6	4	—
Economic geology		67	14	16	16	5
Engineering and mining journal		19	2	8	4	4
Geographical review		21	5	7	4	1
Geological magazine (London)		36	9	1	7	4
Geological society of America. Bulletin		73	15	16	15	6
Geological society of London. Quarterly journal		41	11	14	11	4
Geologisches zentralblatt		31	9	10	4	1
Journal of geography		25	5	9	7	3
Journal of geology		68	14	17	16	7

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
Journal of paleontology		42	11	12	8	2
Mineralogical magazine and journal of the Mineralogical Society (London)		34	8	9	6	2
Mining and metallurgical society of America. Bulletin		24	6	6	6	2
Mining and metallurgy		29	5	8	6	4
Neues Jahrbuch für mineralogie, geologie und palaeontologie (with Zentralblatt)		17	11	8	4	2
Pan-American geologist		31	6	10	8	6
Seismological society of America. Bulletin		16	7	7	4	3
Société géologique de France, Paris. Bulletin (Includes Compte rendu sommaire et bulletin)		17	10	10	3	2
Zentralblatt für mineralogie, geologie und paläontologie		23	9	9	3	1

IV. BIOLOGICAL SCIENCES

Interdepartmental

American journal of anatomy	Biology	18	11	13	10	4
	Zoology	32	13	16	9	5
American journal of botany	Biology	11	7	10	7	1
	Botany	67	20	23	19	2
American journal of physiology	Biology	20	10	12	10	2
	Phys. Ed.	29	15	22	18	9
	Zoology	24	9	9	7	4
American naturalist	Biology	24	3	11	15	7
	Botany	19	1	4	5	7
	Zoology	36	7	14	11	9
Anatomical record	Biology	18	9	10	8	1
	Zoology	28	14	12	8	1
Biological abstracts	Biology	41	27	23	5	2
	Botany	38	15	19	2	1
	Zoology	33	16	14	2	3
Biological bulletin (Marine biological laboratory, Woods Hole, Mass.)	Biology	27	17	15	12	4
	Zoology	28	11	9	7	4
Biologisches zentralblatt	Biology	8	12	12	4	4
Ecology	Biology	17	9	11	9	6
	Botany	26	9	10	7	3
	Zoology	22	9	11	9	3
Eugenics	Biology	17	6	13	11	6
	Soc. Sci.	17	9	10	12	9
	Zoology	19	6	8	7	8
Genetics (Princeton)	Biology	17	12	13	11	3
Human biology . . .	Biology	17	10	11	13	12
	Zoology	17	6	8	9	9
Hygeia	Home Ec.	48	4	7	10	9
	Phys. Ed.	28	4	16	18	21
Journal of ecology	Biology	12	10	14	9	4
	Botany	20	7	7	6	—
	Zoology	15	9	8	6	2
Journal of experimental biology	Biology	21	17	18	14	3
	Zoology	22	10	9	7	4
Journal of experimental zoology	Biology	24	14	15	15	4
	Zoology	36	16	16	14	6

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
Journal of general physiology	Biology	11	8	10	5	3
	Zoology	21	9	9	7	3
Journal of genetics	Biology	15	10	13	6	2
	Zoology	17	8	6	5	2
Journal of heredity	Biology	23	9	15	13	8
	Zoology	28	9	11	12	9
Journal of morphology (Formerly	Biology	15	8	10	7	1
Journal of morphology and physi- ology)	Zoology	43	17	17	12	4
Quarterly journal of microscopical science	Biology	13	9	10	9	3
	Zoology	22	11	8	5	3
Science news-letter . . .	Biology	13	1	8	5	11
	Zoology	21	1	7	4	9
Scientific monthly	Biology	18	1	9	7	10
	Chemistry	27	7	19	13	22
	Zoology	28	1	7	7	9
Société de biologie, Paris, Compte rendu hebdomadaires des séances at mémoires	Biology	9	10	6	6	1
<i>Zoology</i>						
American microscopical society. Transactions		22	12	12	8	2
Anatomischer anzeiger		17	14	10	4	1
Archives de zoologie expérimentale et générale		18	13	12	3	—
Bird-lore		17	4	6	6	8
Entomological news		20	10	12	6	5
Entomological society of America. Anals		16	8	12	7	3
Journal of mammalogy		21	11	14	16	6
Journal of parasitology		17	11	13	9	3
Physiological zoology		21	11	11	12	3
Quarterly review of biology		34	10	15	13	8
Société zoologique de France, Paris. Bulletin		13	12	12	4	1
Wistar institute of anatomy and biology, Philadelphia. Biographic service		16	8	7	3	—
Zoological record		40	20	14	5	3
Zoologische jahrbücher (Supplementband)		18	13	12	3	—
Zoologischer anzeiger		31	17	16	2	—
<i>Botany</i>						
American botanist		23	9	10	7	4
Annales des sciences naturelles. Botanique		12	11	11	2	—
Annals of botany		40	20	20	19	2
Beitraege zur biologie der pflanzen		7	10	9	2	2
Botanical gazette. Chicago		56	17	18	17	3
Botanische jahrbücher für systematik pflanzengeschichte und pflanzen geographie		19	17	12	5	3
Botanisches zentralblatt		20	16	14	5	2
Bulletin of applied botany, genetics, and plant breeding		15	12	10	6	1
Deutsche botanische gesellschaft. Berlin Berichte		17	15	11	4	2
Flora; oder, Allgemeine botanische zeitung		9	11	7	2	—
Harvard University. Arnold arboretum. Journal		9	10	9	4	4
Jahrbücher für wissenschaftliche botanik		14	12	11	1	2
Journal of botany, British and foreign		21	13	11	9	3

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
Nature magazine (American nature association)		15	2	5	5	7
New phytologist . . .		22	8	8	9	3
New York botanical gadren. Journal		19	11	11	11	5
Phytopathology		19	10	8	10	2
Plant physiology		24	11	10	9	1
Quarterly review of botany		29	14	19	17	8
Revue générale de botanique		10	11	11	4	1
St. Louis, Missouri botanical garden. Annals		25	15	12	11	3
Torrey botanical club, New York. Bulletin		35	18	17	15	5
Torreya		15	5	9	7	4
Zeitschrift für botanik		9	14	11	5	—
<i>Home Economics</i>						
American child		18	—	7	5	6
American childhood		15	—	6	6	4
American cookery		37	—	7	6	10
American dietetic association. Journal		40	2	9	11	5
American journal of diseases of children		23	4	6	10	2
American Medical Association. Journal		21	3	6	4	—
American restaurant		15	1	2	4	2
Better homes and gardens		47	—	7	11	11
Childhood education		15	—	4	6	4
Delineator		36	—	5	3	14
Dry goods economist		23	3	9	7	5
Food industries		22	1	6	11	8
Forecast; America's pure food champion		31	1	6	11	8
Good housekeeping		43	—	8	9	12
Harper's bazaar		31	—	3	3	6
Home economics news (Merged into Practical home economics)		61	1	19	9	8
House furnishing review		16	1	4	4	3
Industrial arts and vocational education		20	—	4	4	1
Interior architecture and decoration combined with Good furniture and decoration		34	1	8	8	7
Journal of home economics		70	2	15	14	11
Journal of nutrition		55	4	12	11	4
Ladies' home journal		18	—	4	5	11
McCall's fashion quarterly		33	—	4	2	5
McCall's magazine		25	—	6	5	8
National research council. Committee on child development. Child development abstracts and bibliography		16	2	6	3	1
Parents' magazine		40	—	7	8	9
Pictorial review		25	—	1	3	9
Practical home economics		32	1	6	4	6
Style		26	1	5	3	1
Style sources of American fashions		31	—	4	5	3
Teachers college record		18	3	7	2	3
Textile world		34	4	6	6	4
Vogue		59	1	10	8	8
Women's wear magazine (Now Style sources)		48	1	10	8	5
<i>Physical Education</i>						
American journal of hygiene		32	10	20	19	8
American journal of public health and the Nation's health		20	6	13	12	5

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
Athletic journal		24	6	13	12	5
Journal of health and physical education		25	7	11	12	7
Journal of physical education		34	7	12	13	13
Mind and body		20	6	12	13	12
Research quarterly. American physical education association review		25	7	11	12	7

V. SOCIAL SCIENCES

Interdepartmental

Academy of political science, New York. Proceedings	Economics	24	8	17	17	11
	History	19	13	12	6	5
	Pol. Sci.	46	13	25	15	10
	Soc. Science	17	9	9	8	5
American academy of political and social science, Philadelphia. Annals	Economics	53	19	36	31	22
	History	34	22	28	19	13
	Pol. Science	67	25	34	23	10
	Soc. Science	53	18	24	23	11
American association of university professors. Bulletin	Education	17	7	20	3	4
	Pol. Science	17	—	9	—	1
American city	Pol. Science	37	7	18	19	9
	Soc. Science	15	3	9	7	8
American economic review	Economics	74	25	41	29	23
	Pol. Science	21	11	12	3	3
	Soc. Science	16	8	11	8	4
American historical review	History	73	34	44	35	18
	Pol. Science	31	15	17	9	4
American journal of international law	History	23	17	20	15	3
	Pol. Science	47	16	25	15	3
American journal of sociology	Pol. Science	16	8	13	6	7
	Soc. Science	74	24	31	31	15
American labor legislation review	Economics	42	16	29	22	16
	Soc. Science	28	11	14	13	4
	Pol. Science	19	8	13	6	7
Canadian historical review	History	26	19	26	17	10
	Pol. Science	11	19	13	7	3
Congressional digest	History	18	5	12	11	3
	Pol. Science	29	12	17	16	8
Congressional record	Economics	14	11	6	2	4
	History	29	24	15	14	4
	Pol. Science	46	22	14	14	4
Economic geography	Economics	18	8	15	16	10
	Geology	28	7	8	6	5
Economic history review (Lindon)	Economics	16	14	18	12	5
	History	12	14	22	5	5
English history review	History	38	22	32	21	10
	Pol. Science	15	8	11	7	7
Foreign affairs (London)	History	18	8	17	11	10
	Pol. Science	21	4	17	11	11
Foreign policy association. News Bulletin	History	16	5	15	12	7
	Pol. Science	29	7	17	12	7

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
Foreign policy association, New York. Pamphlets	History	18	5	10	8	4
	Pol. Science	28	7	14	12	7
International labour review	Economics	27	17	25	18	13
	Pol. Science	16	13	11	8	2
Journal of educational sociology	Education	31	13	23	18	13
	Soc. Science	15	7	11	10	8
Journal of modern history	History	42	21	30	27	16
	Pol. Science	16	13	10	6	4
Journal of political economy	Economics	39	14	26	23	14
	Pol. Science	17	9	15	6	6
League of nations, Economic and Financial sections [Reports]	Economics	14	16	14	6	6
	Pol. Science	16	13	10	6	4
League of nations. Monthly summary	History	31	18	23	19	12
	Pol. Science	38	12	17	14	8
League of nations news (League of nations association) (N.Y.)	History	32	13	21	19	15
	Pol. Science	46	14	25	17	18
League of nations, Official journal	History	20	13	15	13	6
	Pol. Science	35	18	18	12	6
League of nations, Political section [Reports]	History	16	11	10	9	4
	Pol. Science	31	17	18	14	3
League of nations. Treaty series	History	23	14	13	13	5
	Pol. Science	33	20	16	13	3
New York times index	History	21	11	7	4	2
	Pol. Science	28	9	11	6	3
North American review	History	20	3	8	7	16
	Pol. Science	23	4	11	10	16
Political science quarterly	Economics	16	6	14	11	10
	History	31	19	26	22	14
	Pol. Science	64	17	33	30	17
Social science abstracts	Economics	26	17	21	7	4
	History	24	13	14	5	2
	Pol. Science	33	14	17	8	3
	Soc. Science	47	20	22	13	10
Survey	Economics	15	6	10	8	11
	Soc. Science	49	10	21	21	17
U.S. Bureau of labor statistics.	Economics	43	21	27	21	17
Monthly labor review	Soc. Science	17	6	8	8	4
World peace foundation, Boston.	History	26	12	17	14	11
Publications	Pol. Science	43	13	22	18	12

Economics

American banker's association, N.Y. Journal	22	10	23	20	15
American federationist	19	6	13	12	10
American statistical association. Journal	28	15	22	16	13
Bankers magazine	18	11	24	16	19
Barron's. The national financial weekly	17	14	20	13	14
Business week	16	5	15	5	16
Chase economic bulletin	31	11	22	17	19
Commerce and finance	21	14	23	17	22
Commerce monthly (Merged into Guaranty Survey)	17	11	15	12	13
Economic journal	37	17	30	20	13

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
Economist		24	13	24	12	13
Harvard business review		39	20	32	25	21
Journal of economic and business history (Harvard. University. Graduate School of business administration)		29	16	25	19	17
Journal of land economics and public utility economics. (Institute for research in land economics and public utilities, Madison).		22	19	19	20	12
Labor		16	5	12	7	7
National bureau of economic research. Bulletin (Formerly News-bulletin)		26	17	22	10	7
National tax association. Bulletin		24	12	20	13	7
Nation's business		21	4	17	14	20
Quarterly journal of economics (Har- vard university)		60	26	40	37	21
Railway age		15	12	18	12	14
Review of economic statistics (Harvard. University. Committee on economic research)		26	22	25	18	10
Stable money association, New York. Bulletin.		15	7	19	7	9
U.S. Bureau of foreign and domestic commerce. Commerce reports.		23	15	17	11	12
U.S. Bureau of the census. Survey of current business		15	7	12	7	9
U.S. Federal reserve board. Federal reserve bulletin		38	24	26	20	15

Education

American journal of psychology	22	8	13	13	5
American school board journal	26	10	28	25	13
California quarterly of secondary education	18	9	17	19	17
Child life (Chicago)	20	5	18	15	17
Child study (N.Y.) (Child study association of America)	35	—	10	10	7
Child welfare: The national parent-teacher magazine (Philadelphia)	19	4	18	14	3
Childhood education	19	4	18	13	13
Education (Boston)	25	7	18	17	19
Education index	35	24	16	10	6
Educational administration and supervision	58	16	28	33	19
Educational method	54	11	29	30	19
Educational record (Washington)	35	12	19	16	12
Educational research bulletin (Ohio State University, Columbus. Bureau of educational research)	45	26	27	22	13
Educational review (N.Y.) (Merged into School and Society)	51	14	28	22	18
Elementary school journal	45	10	24	20	21
High school teacher	33	4	27	26	20
Journal of adult education (N.Y.)	20	8	22	13	17
Journal of applied psychology	20	10	15	12	7
Journal of education (Boston)	31	7	23	18	17
Journal of educational psychology	49	27	26	30	14
Journal of educational research	54	32	28	32	18
Journal of experimental psychology	17	11	12	9	6
Journal of higher education	29	7	24	12	14
Junior college journal	19	11	24	15	14
Junior-senior high school clearing house	15	5	14	15	9

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
Mathematics teacher		20	3	10	13	6
National education association. Department of secondary school principals. Bulletin		36	17	29	29	15
National education association of the United States. Journal		36	11	23	20	21
National education association. Research division. Research bulletin		42	27	27	25	11
Nation's schools		31	6	21	21	14
North central association quarterly		21	8	16	13	6
Peabody journal of education		24	8	23	21	14
Pedagogical seminary and journal of genetic psychology. Formerly Peabody seminary)		19	16	17	16	10
Progressive education		31	7	20	18	18
Religious education		15	5	13	9	13
School and society		59	13	35	30	28
School executives magazine		20	9	18	13	15
School life (Washington, D.C.)		28	4	23	12	13
School review; a journal of secondary education		50	15	32	30	23
Teachers college record		47	18	32	26	17
Teachers' journal and abstract		19	7	18	11	9

History

Association for international conciliation. American branch. International conciliation	18	9	13	10	7
Cambridge historical journal	13	16	21	7	6
Contemporary review (London)	19	6	9	5	12
Fortnightly review (New York)	18	6	14	11	14
Hispanic American historical review	27	16	23	19	8
Historical outlook	45	11	27	19	14
Historische zeitschrift	15	17	19	3	2
History (London)	21	13	22	12	8
Mississippi valley historical review	35	20	23	23	12
Missouri historical review	15	18	17	9	8
National geographic magazine	16	3	10	9	16
New outlook (New York) (Formerly Outlook and independent)	15	1	5	4	14
Speculum	17	9	15	10	7

Political Science

American municipalities	17	5	11	7	10
American political science review	79	24	36	27	11
Association for international conciliation. American branch. International conciliation	31	12	21	17	7
City planning	16	9	12	11	6
Foreign affairs (New York)	63	14	30	26	18
Hague. Permanent court of international justice. Publications	18	13	12	9	2
Harvard law review	14	11	15	11	8
Journal of comparative legislation and international law	15	11	14	9	2
League of nations. Mandates and Slavery (Reports)	15	15	11	6	1
National council for the prevention of war. News bulletin (Formerly Bulletin)	15	11	14	9	2
National municipal review	51	14	26	21	14

Title of Periodical	Departments Reporting It Useful	Percent- age Index	Purpose Indicated			
			Re- search	Profes- sional	Collat- eral	Gen- eral
Political quarterly, (London)		22	7	16	14	11
Southwestern political and social science quarterly		25	9	16	13	8
Time, the weekly news magazine, N.Y.		17	1	6	1	10
<i>Social Science</i>						
American anthropologist		29	10	17	13	4
Family		30	10	13	13	16
Journal of criminal law and criminology (American, institute of criminal and criminology)						
(Formerly Institute's journal)		36	16	18	17	4
Journal of social hygiene		18	10	14	13	9
National conference of social work. Proceedings		30	10	13	14	8
Social forces		51	16	24	16	23
Social science		20	7	10	10	14
Social service review		24	8	13	10	7
Sociological review		46	17	23	14	17
Sociology and social research		32	16	19	12	10
Sociologus (Formerly Zeitschrift für völkerpsychologie und soziologie)		9	8	11	3	1

AN INVESTIGATION TO DETERMINE THE CORRECT ART CONCEPTS OF TONE FOR TEACHING PURPOSES

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THE aim of the study reported in this article is to establish, if possible, a practical knowledge and understanding of tone quality in the field of the Space Arts.

The major purpose, however, may be defined better in terms of teacher and pupil needs in the school. The entire objective of the investigation is to help teachers of art in arriving at a sound use of the term *tone*, and its various concepts, for purposes of instructing the rising generation now in the school.

The investigation, in reality, is an outgrowth of research¹ completed by the Committee on Terminology of the Federated Council on Art Education in 1929. This earlier study was undertaken to present to workers in the field of art education constructive suggestions for improvement of the basic art vocabulary. It classified the word *tone* in respect to its place in connection with other technical terms which make up the language of art, but it did not attempt to deal with the various concepts of tone.

Tone is one of the richest terms in significant meaning we have in the nomenclature of art. If properly defined and explained the word will do much to clarify a field of art interpretation which now is hampered by a group of adapted and make-shift terms, some of which have no rightful place in the American vocabulary.

Troublesome Features of the Word

¹W. G. Whitford, Raymond P. Ensign, and Lorado Taft. *Report of the Committee on Terminology*. Baltimore, Maryland: The Federated Council on Art Education (3 East 25th Street) 1929. (Price fifty cents)

Tone.—Of the one hundred technical art terms analyzed and classified in the Federated Council report, the most indefinite and difficult word to deal with was *tone*. It is frequently referred to as both an *element* and as a *resulting attribute*. Used in the sense of the element it usually designates qualities of value or color. When employed in the sense of an attribute it designates a quality which is frequently expressed by the term *tonality*.²

Many writers have referred to the misleading implications of the word *tone*. Some have expressed the hope that the term would go out of existence because it is so loosely used as to become practically meaningless. However, this easy solution of the problem is not likely, and the fact remains that the pupils in our schools will encounter the word in most of the books on art which are assigned to them for reading.

Upon careful analysis, the troublesome feature of the word seems to lie in a limited meaning of the old time use of the term and a more modern definition of it occurring in recent literature.

To many old time writers *tone* referred to a "toning down" process employed to produce very close relationship of values and colors in a picture. Illustration of the early use of the word is to be found in the discussions of the "brown gravy" school of painters of the late 18th and early 19th centuries.

The concept of tone in this sense implies that a landscape in Nature or a picture must appear to be shrouded in

²*Ibid.*, p. 31.

fog or enveloped in smoke to possess the quality of tone. Many pictures of this type become in reality "monotones of monotony."

Broadening Concepts of Tone.—Dense atmosphere, dawn, twilight, and night have tonal qualities, also a landscape at high noon may be full of tonal beauty. Today artists are filling their pictures with bright, scintillating colors which, to students in this age of color, seem to possess tonality of an infinitely finer quality than that of the old school of painters.

Most dictionaries and the older books on art define tone as pertaining to *paintings*, whereas the modern writer interprets the term to include qualities to be found in architecture, sculpture, the graphic, industrial and related arts as well as in painting.

At the present time this broader conception is being given to tone by art critics and publicity writers. We find a new use of the term in architectural and industrial publications and in the current advertising literature. The present interpretation is richer and fuller in meaning than that encountered in former writings. Both the old concepts and the new should be considered in regard to their place in the teaching program of the modern school.

Procedure of Securing Data.—In order to present an impersonal and objective study of the problem an experimental teaching unit comprising twenty pages of text and twenty-six illustrations was compiled in tentative form. The text represented an attempt to interpret the term TONE and its various concepts as found in a careful analysis of sixty-five books on art and of current literature in which the word was used.

Nearly every book on art contains some reference to *tone* or *tonality*. Forty different definitions of tone were compiled and carded in the study. Their

essential concepts were incorporated into the tentative unit.

The unit material was then sent out to a group of thirty prominent authorities on art and art education for analysis and criticism. The aim in this case was to determine the opinions held by contemporary art educators and then to revise the material in the light of the findings.

The group of thirty collaborators was chosen purposely from high ranking authorities of the country who would be competent to give authoritative opinions in regard to the material. In every case the collaborator chosen is an author of an outstanding book on art (in some cases the author of five or more books), the head of an art department of an important university, college, normal school, or art museum, or a city supervisor of art in the public schools.

Because of the designation of collaborators given above, it seems inadvisable to publish the names in this report. But a catalogue of their writings would reveal a list of some of the most influential leaders in the field of art education at the present time.

The following questions were attached to the experimental material and the collaborators were asked to answer one of them by checking *Yes* or *No*.

I. I have read the "Experimental Unit on Tone" carefully and agree with its teaching concepts as presented in the present form.

YES... NO...

Signature

II. I have read the "Experimental Unit on Tone" carefully and have indicated corrections to it on the margin of the sheets.

If these suggestions are incorporated into the material it will have my complete approval as appropriate teaching material to be put into the hands of high school teachers for the guidance of pupils in regard to the art concepts of TONE.

YES... NO...

Signature

Eight collaborators indicated agreement with the material in its tentative form by answering "Yes" to Question I.

Eleven collaborators checked "Yes" in Question II and submitted suggestions which have been included, in practically all cases, in the revised material here published.

Eight collaborators did not answer either question, but sent personal letters explaining individual points of view. These letters were generally favorable to the material as presented in tentative form, except as follows—

Two of the collaborators objected to the entire approach of the material in the original form. One objection pertained especially to any attempt to explain *tone* by use of text material. The following comment was made in this respect.

Understanding of *tone* comes as does "value," "texture," and the rest, with studio experiences devised to exercise the pupil's observation and technical dexterity.

One collaborator voted "No" to both questions because of the approach to an appreciation of tone quality through Nature presented in the introduction to the unit.

It will be noted that 28 out of the 30 authorities who agreed to cooperate in the investigation returned replies. In many cases the replies were the result, not of one individual alone, but of a group of individuals formed into a sub-committee to analyze and criticize the material. Grateful acknowledgment is here made to the helpful contributions of these individuals and groups.

Request for Further Cooperation.—In the pages which follow, an interpretation of the material on tone is given with a fairly complete digest of the opinions submitted by the group of collaborators. It is not submitted as a solution of the problems pertaining to use of the word tone. It is merely a frank attempt

to analyze the problem with the hope that some constructive reorganization may be accomplished in this particular phase of art terminology.

As the work upon the topic is still in process of adjustment criticism from teachers, supervisors and art educators generally will be greatly appreciated. All suggestions will be considered carefully in the final revision of the material. Criticisms should be sent to William G. Whitford, Box 30, Graduate Education Building, The University of Chicago, Chicago, Illinois.

ANALYSIS OF REPLIES

Different Concepts Presented.—Careful analysis of all replies from collaborators indicated a need to expand, rather than to contract, the meaning of tone as used by present day authorities. The following concepts were presented and seem to be essential for a complete understanding and treatment of this factor of art quality.

1. Concept of Value
2. Concept of Hue
3. Concept of Key
4. Concept of Pattern
5. Concept of Modulation and Graduation
6. Concept of Illumination and Shadow
7. Concept of Texture
8. Special Concepts such as opacity and transparency of tone, design, linear pattern, intensity and mood.

For purposes of simplicity in presentation, these various concepts have been grouped into five classes as follows:

- A. Concept of Value, "Prevailing Value Note"
- B. Concept of Hue, "Prevailing Color Note"
- C. Concept of Unity or Key, "Prevailing Effect of a Group of Values or a Group of Colors, or of Both Combined."
- D. Concept of LIGHT Effect, or the Light and Dark Pattern.
- E. Concept of Surface Quality or Texture

A. *The Concept of Value, "Prevailing Value Note."*—The quality of lightness, darkness or grayness is an elemental

concept of tone which is designated usually by the terms *value* or *values*.

The value groups may be classified as light, middle and dark. The quality of the value is determined by its location in respect to middle gray. We may say that the tones are light in value, dark in value or of middle value, or that a picture is light or dark or medium in tone depending upon the value concept. Also the terms low, middle, and high in tone or value are often used in this connection.

The term "neutral value" is employed generally to imply the absence of color. Value scales of three, five, seven, nine or more parts are used frequently in interpreting the light and dark pattern in a work of art. However, the value concept also applies to color. We speak of light and dark colors or hues.

The concept here presented is somewhat restricted. It is usually discussed in connection with the element *value* or "*light and dark*."

B. *The Concept of Hue, "Prevailing Color Note."*—The concept of "color tone" deals with a general effect of hue, as a red a blue or a golden tone. Also the lightness or darkness or the dullness or brilliance of a tone may be included. The following expressions are often used in this connection: "the luminous tone of a light blue sky," "the deep blue tone of water." The concept of a prevailing color note is characterized by such expressions as "the picture has a red tone or a blue tone."

The value concept is also repeated in connection with color as already noted. In this case the terms "neutral tones" and "color tones" are frequently used to avoid confusion in meaning.

Another concept deals with the physiological and psychological effect of the hue, or hues, used in a work of art, as for example, a warm or a cool tone, or a gay or a sombre tone. The special concept of opacity or transparency of tone is

frequently used in discussing qualities of color. This is a pigment concept.

The concepts presented here are somewhat restricted. They are usually discussed in connection with the element of color as *hue*, *value* and *intensity*.

In the case of concepts A and B, the words value and hue designate the same properties as the terms "value tone" and "color tone". These terms may be used interchangeably as, for example, a light value or a light tone, a red hue or a red tone.

C. *The Concept of Unity or Key, "Prevailing Effect of a Group of Values or a Group of Colors, or of Both Combined."*—"The prevailing effect of values or colors" is a broader concept than a "prevailing value note" or a "prevailing color note."

Prevailing effect of values or colors refers to the general value or color treatment or both and their effects in producing tone. The concept of necessity is divided into two closely related parts: (1) the prevailing effect of values without color as in an uncolored photograph; and (2) the prevailing effect of color as in an oil painting.

In the case of a painting, however, the value and color concepts are combined for there are different degrees of value in color.

Perhaps the most common cause of confusion in thinking about tone in this respect is the fact that the properties of "light and dark" and of color are both used in describing tone quality without the necessary distinction being made between them.

In Nature all tone contains color and in most paintings color is a dominating feature, yet light and dark values contribute to the final tonal beauty. In the arts other than painting, tone quality may exist in light and dark value with or without the accompanying quality of color.

The essential concept here presented is one of close relationship, of unity or "oneness" of value and color, or in other words, of *harmony*. In many cases the tone quality is dependent upon a value or color "key" which governs the relationship of light and dark and color. It is the concept most frequently used in discussing paintings, design or other works of art, in which value and color arrangements are employed.

The modern use of the term does not imply necessarily the monotone or sombre gray or brown type of harmony produced by the "tonal" painters of past centuries. It does, however, signify harmony in the use of values and color.

In modern painting harmony is produced, not by "toning down" but by "toning up" the color relationship. In modern art painting has become lively; it is characterized by minute contrasts. The old grays and browns give way to chromatic pattern.¹

Yet we may say that the paintings of the present age have beauty of tone. The paintings of Renoir are examples of tone quality of bright hues made harmonious by subtle relationship of all colors to each other. Such pictures may have a rich and vibrating tone quality—a tonality full of vigor and life and sparkle of color.

Many of the early religious paintings are bright in color and rich in tonal quality. The bright hues of Raphael's *Madonna Della Sedia* glow with radiance of tone which is the result of subtle relationship.

The brilliant, vibrating, gem-like quality of a fine stained glass window is another example of tone quality in which the colors are strong and luminous yet unified in harmonious relationship.

The following comments regarding the concept of unity or key or prevailing

effect were submitted by collaborators in the study.

Tone, or tonal quality, or tonality in the visual arts is a matter of the prevailing effect of a group of values or a group of colors, or the general effect of both combined.

The "pitch" or tonal quality of the work of art is determined by the location of the middle group in relation to the light and dark group. The picture may be above middle value on the chart or scale or it may be below middle value.

In *painting* tone lies in the governance of a single hue which controls every part of the work. Or, in other words, the unification of all colors upon the basis of a given hue. The result may be secured in three different ways, 1) by use of an over glaze, 2) by the use of a neutral which tempers every color, and 3) by direct painting into an amber glaze.

Applied to a composition or scene tone indicates the prevailing quality of the light and dark components and their effect upon the general pattern.

Tone results from a well ordered balance of the color scale over the great principle of oppositional harmony, which produces balance in compositional structure as well as in color. This is frequently found in the Venetian School of painting, where the primaries and secondaries are used in a full orchestration of tonality.

Note the stimulating tonal contrasts the modern painter (and the Italian primitive) achieves.

The concept of *Unity or Prevailing Effect of Values and Colors* is used quite generally in discussing tonality in design and painting and in the graphic, decorative and pictorial arts in general.

D. Concept of LIGHT Effect or the Light and Dark Pattern.—The word tone has acquired new meanings in recent years in addition to the traditional concepts discussed under the three preceding classifications. The term is being used in connection with the modern understanding of LIGHT and the effects of LIGHT in relation to works of art. Here we deal with the "art of light" as well as the material aspects of a work of art.

The term "light" relates to a factor more comprehensive than values or pigments. Effects of light as a *source*,—the

¹Sheldon Cheney, *A Primer of Modern Art*, p. 79. New York: Boni and Liveright, 1928.

sun, the electric light, and other illumination should be considered in the interpretation of works of art as well as light and dark values or colors reflected from surfaces made visible in light.

In connection with material objects light can not be considered without the factor of shadow. Hence the term "light and dark" and "illumination and shadow" are frequently employed in discussing the qualities of light in works of art.

Dr. Ross of Harvard University refers to light in relation to tone as follows:

The effect of light produced by any particular material or mixture we call its tone.¹

In the study of tone in this sense we are not interested so much in the *quantity* of the light and dark as in the *quality* or decorative effect of the light and dark. The effect of light and dark or illumination and shadow frequently results in patterns which help to enhance the tonal quality of a work of art.

Katharine Kahle in discussing the subject of modern tendencies in decorative art refers to design or pattern as follows:

Light and shadow produces effects of design and adds subtle tone quality to a room.²

The concept of pattern is a design concept. We work for tone quality in design, interior decoration, in painting and in all compositional arts.

Design or pattern of light and dark or color may or may not produce tone, but good pattern is one contributing factor in securing tone quality in works of art. In connection with this topic we are interested only in patterns which produce or contribute to tone quality or tonality.

Thomas Wilfred's color organ, the Clavilux, produces constantly changing patterns of light which show infinite gradations and modulations. They are

free from discord and possess a unity of value and color which produces tone quality in an abstract sense unrelated to forms or shapes of reality. Here is an art tone produced through pattern.

The Impressionist artists introduced into painting the concept of "pointillism" or color broken up into many small points. These small bits of color give a pattern effect which strengthens the tone quality of the picture.

Walter Sargent coined a term for areas of broken color which he called "composite color." An area of composite color possesses infinitely more tone quality than one of flat color. The difference is in the minute chromatic pattern produced by the small spots of related color.

Sargent makes the following comment in regard to the factor of pattern:

The pattern of a design, with its gradations and contrasts, is the means by which we can bring out the full range of possibilities of our color tones.¹

A fine stained glass window is an example of tone quality resulting from chromatic pattern with little reference to the relationship of the colors.

Patterns in a work of art which often result in tone quality may be summarized as follows: Linear pattern, pattern of flat values of light and dark, pattern of illumination and shadow, and chromatic pattern. Here again the note should be made that bad pattern does not produce tone quality. **TONALITY** is an attribute which may result from a skillfully adjusted pattern.

It is not intended by the use of the word pattern to convey the idea of structural pattern, but arrangements, informal or otherwise, which, because of their adjustment of light and dark and color, assist in securing tone quality.

In Plate I several examples of light

¹Denman W. Ross, *A Theory of Pure Design*, p. 131. Boston: Houghton-Mifflin and Company, 1907.

²Katharine Morrison Kahle, *Modern French Decoration*, p. 160. New York: G. P. Putnam's Sons, 1930.

¹Walter Sargent, *The Enjoyment and Use of Color*, p. 93. New York: Charles Scribner's Sons, 1923.

and dark pattern, and their effect in producing tone, are presented.

Illustration 1.—The modulation and gradations of light and dark upon the surface of the water in this illustration express the quality of tone produced by pattern of illumination and shadow. Most surfaces reflect light in an interesting way. Rippling water as shown in the picture catches flecks of light as it turns like small mirrors towards the sun. It presents a pattern of graded values, suggesting rough texture, instead of a flat uninteresting surface. In this case the light and dark pattern produces a tonal effect in the picture.

Illustration 2.—The grain or natural pattern of wood such as quarter-sawed oak, bird's-eye maple, burl, walnut, ebony, and many other varieties, produces a pleasing tone quality. The modern designer secures unusually interesting tonal effects in his use of various patterned woods.

Illustration 3.—The photograph here shown is an example of tone quality produced by pattern of illumination and shadow. It is the work of Edward Steichen. Carpet tacks have been arranged upon a flat surface. Illumination has been introduced from two angles which produce crisscrossing shadows of different intensity upon a light ground. An interesting light and dark pattern results which has tone quality.

Illustration 4.—This detail of a wall from a tomb in India presents another example of tone quality. It is an illustration of tone resulting from formal patterns of light and dark. If the original colors of the wall could be shown we would have evidence of the effect of pattern of light and dark and color in producing tone.

Comparison of the photograph of the wall with a color print of it would afford an interesting illustration of the two concepts, "prevailing effect of values with-

out color" and "prevailing effect of color," and their relationship to each other.

The following comments regarding the concept of Light Effect or the Light and Dark Pattern were submitted by collaborators in the study.

In our modern terminology tone has come to mean quality of light and dark. This is dependent upon the amount of the light or dark employed upon the various areas or surfaces that are represented. Thus to secure the quality known as tone we are dependent upon pattern and gradation of light and dark.

I agree implicitly with the statement marked on page 8. "It is a problem of selection and arrangement of aesthetic qualities, i.e., the beauty of light and dark pattern irrespective of pure representation . . .

A great work of art so unifies pattern and tone that it is difficult to separate them; but for purposes of analysis it seems possible and desirable to do so.

And since "pattern" is often thought of in a limited sense the following comment will assist in the understanding of this factor. Pattern as indicated by tone may be due to forms which are made visible by contrasting areas, or to vibrations in values, textures, and colors with little relation to form pattern.

I have a feeling that conscious recognition of tone rhythm is necessary in the understanding of art. The teacher and student must realize the rhythmic sequence of tone movement from black to white, bright to dull, color to color, warm to cool, etc., if appreciation is to be achieved.

The modulation and gradation of values and colors was referred to by several collaborators in speaking of effects of pattern in producing tone.

Gradation becomes a great medium of unity.

Distinguish carefully between mere decorative use of dark and light in two dimensional surface rhythms and the value relations which build form and carry out the more intricate three dimensional rhythms in deep space.

Symphony of tone is produced by architectural details such as the carved patterns of the egg and dart border, acanthus foliage, and other ornamental designs.

Ruskin makes much of the light and dark pattern in architecture.

PLATE I. EXAMPLES OF LIGHT AND DARK PATTERNS AND THEIR
EFFECT IN PRODUCTION TONE



ILLUSTRATION 1. Modulation of light and dark upon the surface of form.



ILLUSTRATION 2. The grain or natural pattern of wood.



ILLUSTRATION 3. Pattern of illumination and shadow.

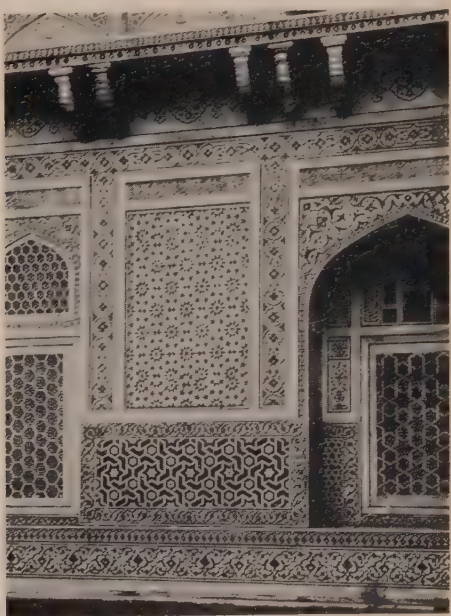


ILLUSTRATION 4. Formal patterns in light and dark values.



ILLUSTRATION 5. Pattern of "light and dark" or "illumination and shadow" frequently produces tonality of unusual quality in architecture, sculpture and industrial arts.



ILLUSTRATION 6. The textural concept of tone is one depending upon the play of "light and dark" or "illumination and shadow" upon the surface of form.

The concept "*Light Effect or the Light and Dark Pattern*" is employed in modern literature in discussing tone quality in all the arts. Patterns of light and dark or illumination and shadow frequently produce tonality of unusual quality in architecture, sculpture and the industrial arts.

In painting the artist deals with light and dark pattern in two dimensions. In architecture and related arts the three dimensional aspects of pattern is apparent in producing tone.

In Illustration 5, an example of "architectural light and shade" is presented. The Woolworth Building, New York City, is not as typical of modern architecture as some of the more recent structures. However, it illustrates the factor of tone quality produced by pattern of light and dark as discussed under this topic.

E. The Concept of Surface Quality or Texture.—Surface quality or texture contributes to beauty of tone in works of art.

Texture as a component in the production of tone has never until this age been fully understood or discussed in the literature of art.

The concept has become popularized by the great awakening to beauty of surface quality in the products of industry demonstrated by the Paris International Exposition in 1925 and subsequent exhibitions of industrial art. Use of the word tone in connection with discussions of surface quality has become frequent in modern publications and in industrial and advertising literature.

The textural concept of tone is one depending upon the play of light and dark or illumination and shadow upon the surface of form. Of necessity the effect of light breaks the surface into patterns of illumination and shadow or light and dark.

These patterns may be microscopic, as in the delicate texture of a moth's wings, or they may be magnitudinous, as in the splendor of the play of light and dark across the Grand Canyon or on the sides of a distant mountain.

Every object in our material world has a surface quality which distinguishes it and gives to it a character of its own. The beauty or lack of beauty in such objects, aside from their form and color, is due to the quality of the surface and the light effect which the object produces.

The tone quality of a specific area or object, such as a dark velvet, denotes more than the actual hue which may be red or blue or violet. The true tone of the velvet can only be described by interpreting the play of light upon the surface. This play of light greatly influences the color and gives to it a tone quality not present in a flat pigment showing exactly the same hue. Tone refers here to the *value* of the velvet (dark), to the *color* (red or blue or violet), and to the *textural quality* of its surface and its characteristic effect of light.

The following comments regarding the concept of Surface Quality and Tone were submitted by collaborators in the study—

I think we have given full attention to the first three ways in which tone quality may be produced (illumination and shadow, values or flat pattern of light and dark, and color or chromatic pattern), but not enough to the fourth—"Texture."

Even flat surfaces as they retreat in different directions from the observer may present pleasing tone effects of light and dark. But broken surfaces offer greater opportunity for delightful pattern.

Tone refers to textural material or surface and the manner in which textures may be combined. (A gray blanket, or cement wall, gains quality and interest when judiciously opposed to other objects).

Another cause of confusion in thinking about tone is the fact that texture influences tone. Two surfaces which are identical in value and color may give very different tonal effects because of a difference in texture—compare the two sides of a piece of satin.

Tone includes the visual impression of value, of hue, and intensity, of illumination and texture.

The concept of *Surface Quality or Texture* as a factor in producing tone is employed in the discussion of all the arts. It has been given prominence in recent literature in the interpretation of beauty in architecture, sculpture and the handicrafts or industrial arts.

In Illustration 6, a window detail from the Alhambra is shown. It is an example of the tone quality produced by texture. The illustration is too small to more than hint at the beauty of the play of light and dark upon the carved and incised wall surfaces of this historic building.

Color and Tone.—The full beauty of tone as an attribute of art can not be shown without illustrations in full color. Colored reproductions, unfortunately, can not be shown in connection with this discussion. Color presents a beauty of its own, but it is so closely tied up with light and dark pattern that it is often difficult to distinguish between them. It will help us to appreciate the beauty of tone in which color appears if we have become conscious of the quality of tone without color. Color adds to and enhances the beauty of tone to be observed in Nature and in Art.

SUMMARY

The Composite Meaning of the Term Tone.—Perhaps the most significant conclusions which can be drawn from this study at the present time are as follows:

- I. That the word TONE as used in present day literature should be classified as an *attribute* and not as an *element* of art.
- II. That TONE as an attribute possesses several components which may be classified for teaching purposes as

discussed under sections A, B, C, D, and E of this report, namely,

1. The Concept of Value, "Prevailing Value Note"
 2. The Concept of Hue, "Prevailing Color Note"
 3. The Concept of Unity or Key, "Prevailing Effect of a Group of Values or a Group of Colors, or of Both Combined."
 4. The Concept of LIGHT Effect or the Light and Dark Pattern
 5. The Concept of Surface Quality or Texture
- III. That knowledge of the various concepts is necessary for a complete understanding and appreciation of TONE or TONALITY in works of art.
- IV. That concepts 1 and 2 are *restricted* concepts which are developed usually in connection with the elements of *value* and *color*.
- V. That concepts 3, 4, and 5 are *major concepts* of tone which require careful interpretation in the modern program of art study.

The definition of tone found in dictionaries and in most of the older books on art is restricted to painting. It does not take into account sufficiently the factors of tonality which have gained prominence with the current interest in the aesthetic qualities of the plastic and constructive arts. A modern definition is needed which will include tone qualities to be observed in architecture, sculpture and the industrial and related arts as well as in painting.

All of the concepts are employed in modern literature in discussing various kinds of art. However, use of the word TONE or TONALITY may be clarified somewhat by using concept 3, *Unity or Prevailing Effect of Values and Colors*, as applying more essentially to the Graphic and Pictorial arts, and Concepts 4 and 5, *Pattern of Light and Dark (whether colored or not)*, and *Surface*

Quality or Texture, as applying more essentially to the field of architecture, sculpture, and the industrial and related arts.

It has not been the intention in this report to emphasize one concept more than another. However, the newer concepts have been given more space than the more traditional factors of tone. This has been done because less material is available for teaching purposes in regard to these more recent implications in the meaning of the word *tone* or *tonality*.

Final Note.—One collaborator in this investigation made the following statement in summarizing the need for more accurate terminology for teaching purposes:

In the confusion of art terms, lies one of the greatest, (if not the greatest) difficulty encountered by beginners in the study of art.

Perhaps the greatest cause of confusion in the use of art nomenclature has been due to the failure of art writers, teachers and critics to agree upon the elements, principles and attributes of art and then to indicate clearly the various concepts which properly belong to each. Many writers will take up one concept and discuss it as the all-inclusive factor. Another writer will perhaps emphasize with equal force other concepts as the essential factors. As a result students and teachers are often bewildered in trying to determine the fundamental considerations of art in a program of study. In

the case of tone, for example, one authority will state that the concept of "prevailing effect" is fundamental for an understanding of tone. Another will contend that "pattern of light and dark whether colored or not" is the basic consideration. And still another will show at length that tone is nothing but the "prevailing hue" or that it signified "value" and nothing else. In reality these various concepts are all components of tone and are essential to a complete understanding of tone quality in works of art.

Also, in the teaching of tone or any other attribute or element, it becomes necessary to determine what concepts are appropriate for the assimilation of the pupils in various grades and with different degrees of art experience.

The major problem in art in this respect as in science or any other subject, is to define carefully the concepts we wish to teach and to organize the entire subject of art so that confusion will not result in nomenclature and subsequent understanding of the language of art.¹

¹The following book, which has just been published, presents a systematic teaching program in art and household art, based upon fundamental concepts. The material of the book is organized around the essential teaching principles necessary for an understanding and use of art in the upper grades of the public school. The book is recommended for instructors of art who wish to develop the concept method of teaching. Mable Russell and Elsie Wilson, *Art Training through Home Problems*. Peoria, Illinois: The Manual Arts Press, 1933. Pp. 214.

REPORT OF THE COMMITTEE ON ATHLETICS IN SECONDARY SCHOOLS

E. E. MORLEY, Chairman
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FORM F in the Principal's Annual Report was devised to secure information to be used as a basis for the 1933 study of athletics in secondary schools of the North Central Association. Returns were received in time to be included in the tabulations from 2228 schools. This year's investigation is the most extensive and far-reaching study of athletics the committee has ever attempted. It furnishes information of significance not only to this commission but to the member schools in the association.

The time allotted for this report on today's program will permit only the briefest comment on each of the 17 tables and a short summary of conclusions and recommendations.

The inquiries included in Form F follow approximately the order of the North Central Association recommendations governing Athletics in Secondary Schools. This report, therefore, will show how member schools are observing these recommendations in actual practice. It will also show more clearly than our previous studies, the present status of athletics in the high school program.

Tables I and II present the number of schools participating in the study classified according to enrollment and give data reported by the schools respecting their observance of STANDARD 10 which prohibits a member school from participating in interstate meets and tournaments not sanctioned by the state athletic association. There is evidence in these tables that the question was not

fully understood by many of the principals. STANDARD 10 does not intend to classify as "interstate" meets, such contests as are scheduled between neighboring schools which happen to be located on opposite sides of a state line. It is encouraging to note that while more than 500 schools report participation in such meets, only 3 of these meets were not approved by the state athletic association. Table II shows that most of the interstate contests were in basketball and the next largest number in track.

Table III compares intramural with interscholastic sports. The significant fact in this table is that much greater emphasis is placed on providing athletic competition for boys than for girls. Furthermore, while more interscholastic teams for boys are maintained than intramural, the opposite is true for girls. There are almost three times as many schools providing girls' intramural competitions as there are having girls' interscholastic teams.

Table IV lists the various interscholastic sports for boys and girls respectively. Tables V and VI carry the analysis of boys' interscholastic sports a step further and show the extent of participation in 7 of the 20 sports listed. The highest percentage of participation is in football, with 17 per cent of boys enrolled taking part and the lowest in golf with 2 per cent. The chances for a boy to participate in any of the sports are thus found to be greater in the smaller schools. For example, as Table VI shows, one boy out of every three in schools of less than 200 pupils takes part in basket-

¹A report made to the Commission on Secondary Schools on April 21, 1933.—THE EDITOR.

ball while only one in twenty has that chance in schools of over 1000 pupils. The small percentage of boys actually benefited by participation in interscholastic sports, especially in the larger schools, raises a question of the relative values of interscholastic athletic competition in these schools.

Tables VII and VIII show the status of the various interscholastic sports for girls in the different enrollment groups of schools. The percentages of schools maintaining the various sports for girls are based on the figures given in Table III and not on the total number of schools as given in Table I. To illustrate,

TABLE I
EXTENT OF PARTICIPATION OF SCHOOLS IN INTERSTATE MEETS AND TOURNAMENTS

Schools Enrolling	Number of Schools Reporting	Number of Schools Participating	Percentage of All Schools Reporting	Number of Such Meets Not Approved by S.A.A.	Percentage of Meets Not Approved
Under 200	808	152	19.5	1	0.7
201-400	684	166	24	1	0.6
401-600	252	63	25	0	0
601-800	150	43	29	1	2
801-1000	79	23	29	0	0
Over 1000	255	61	24	0	0
Total	2228	508	23	3	0.6

TABLE II
SPORTS IN WHICH SUCH MEETS AND TOURNAMENTS WERE HELD

SCHOOLS ENROLLING	NUMBER OF SCHOOLS PARTICIPATING IN						TOTAL
	Football	Basketball	Swimming	Track	Golf	Tennis	
Under 200	10	138	0	44	0	1	193
201-400	11	124	2	64	3	5	209
401-600	3	40	1	28	1	0	73
601-800	4	28	3	30	1	2	68
801-1000	2	7	0	17	0	0	26
Over 1000	5	21	3	44	3	6	82
Total	35	358	9	227	8	14	651

TABLE III
NUMBER OF SCHOOLS MAINTAINING INTERSCHOLASTIC AND INTRAMURAL SPORTS FOR BOYS AND GIRLS

SCHOOLS ENROLLING	MAINTAINING INTERSCHOLASTIC SPORTS				MAINTAINING INTRAMURAL SPORTS			
	For Boys		For Girls		For Boys		For Girls	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Under 200 .	790	88	302	37	593	73	551	68
201-400 ...	679	99	192	28	571	83	499	73
401-600 ...	248	98	48	19	226	89	194	77
601-800 ...	148	99	27	18	135	90	123	82
801-1000 ..	77	97	13	17	74	94	69	87
Over 1000 .	255	100	61	24	231	90	224	88
Total ..	2197	98.6	643	28.8	1830	82	1660	74.5

TABLE IV
NUMBER OF SCHOOLS MAINTAINING INTERSCHOLASTIC TEAMS IN EACH SPORT
FOR BOYS AND GIRLS

SPORTS	SCHOOLS ENROLLING										TOTAL	
	Under 200		201-400		401-600		601-800		801-1000		Over 1000	
	B	G	B	G	B	G	B	G	B	G	B	G
Baseball	265	14	173	6	54	3	29	2	25	1	100	4
Basketball	740	236	658	127	248	26	142	11	77	5	250	23
Boxing	1	0	3	0	1	0	2	0	1	0	4	0
Cross-Country ..	5	0	13	0	8	0	7	0	12	0	64	0
Diamondball	5	0	0	0	0	0	0	0	0	0	0	0
Football	541	0	639	0	242	0	141	0	76	0	251	0
Golf	28	0	78	1	67	0	60	0	36	2	165	20
Gymnastics	0	0	0	0	0	0	1	0	1	0	15	0
Hockey	1	4	9	3	2	2	4	2	5	2	22	17
Kittenball	10	2	0	0	0	0	0	0	1	0	0	11
Playground Ball .	1	2	5	2	0	0	1	0	0	0	2	0
Riflery	1	0	1	0	0	0	0	0	0	0	3	0
Skating	0	0	1	0	0	0	1	0	1	0	5	0
Soccer	5	0	0	0	0	0	1	0	0	0	0	6
Speedball	7	0	0	0	0	0	0	0	0	0	0	7
Swimming	9	4	20	6	19	1	8	2	10	1	109	22
Tennis	112	45	152	52	88	1	62	15	36	7	177	43
Track	442	41	481	26	193	18	111	1	68	0	233	6
Volleyball	7	14	3	6	0	0	1	2	2	1	8	3
Wrestling	15	0	29	0	12	0	11	0	10	0	42	0

TABLE V
NUMBERS AND PERCENTAGES OF SCHOOLS MAINTAINING CERTAIN INTERSCHOLASTIC
SPORTS FOR BOYS

SCHOOLS ENROLLING	SCHOOLS MAINTAINING INTERSCHOLASTIC TEAMS FOR BOYS IN											
	Baseball		Basketball		Football		Swimming		Track		Tennis	
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent
Under 200 .	265	33.5	740	94	541	68	9	1	442	56	112	14
201-400 ..	173	25	658	97	639	94	20	3	481	71	152	22
401-600 ..	54	21	248	98	242	96	19	7	193	76	88	35
601-800 ..	29	20	142	96	141	95	8	5	111	75	62	42
801-1000 .	25	32	77	97	76	96	10	13	68	86	36	46
Over 1000 .	100	39	250	98	251	98	109	43	233	91	177	69
Total ...	646	29	2115	96	1890	86	175	8	1528	69	627	28.5

in Table VII, 14 schools maintain interscholastic teams for girls in baseball. This is approximately 5 per cent of the 302 schools of less than two hundred enrollment that maintain interscholastic competition in any form of athletics for girls. The same tendency to diminish chances for participation as the size of the schools increases is noted here as in the case of boys. However, there seems

to be a larger percentage of girls directly affected by participation than boys, although fewer schools maintain interscholastic teams for girls.

Table IX lists the various sports maintained in the program of intramural athletics in the schools. Thirty-six varieties of sports are listed in this table. Basketball is easily the most popular of all for both boys and girls as is the case

also in interscholastic sports. The percentages of schools having interscholastic basketball for boys and girls respectively are 96 and 67 as compared with 91 and 87 respectively in intramural. The longer list and greater variety of intramural activities suggests more flexibility and

greater emphasis on participation along with less emphasis on winning than in the interscholastic sports.

Table X shows that the medium sized schools, enrolling from 600 to 1000, give more attention to the teaching of the various interscholastic games in regular

TABLE VI
THE EXTENT OF PARTICIPATION IN CERTAIN INTERSCHOLASTIC SPORTS FOR BOYS
AS SHOWN BY THE NUMBERS AND PERCENTAGES OF BOYS TAKING PART

SCHOOLS ENROLLING	NUMBERS AND PERCENTAGES ¹ OF BOYS PARTICIPATING IN													
	Baseball		Basketball		Football		Swimming		Track		Tennis		Golf	
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent
Under 200 ..	5566	33	17404	35	16272	44	170	18	7910	27	893	10	178	7
201-400	4152	18	18436	20	24780	29	451	15	11317	18	1529	7	510	4
401-600	1347	9	8658	14	12392	20	421	7	5790	12	822	3.6	570	3
601-800	914	9	5953	12	8179	17	140	5	3005	8	819	4	601	3
801-1000 ...	728	6.5	3048	9	4683	14	192	4	2984	10	443	3	367	2
Over 1000 ..	3547	3	12685	5	20349	8	3546	3	12670	5.5	2893	1.5	2592	1.5
Total	16281	9	66184	12.6	86655	17	4920	4	43676	10	7399	3	4818	2

¹These percentages are based upon total enrollments in the schools maintaining the respective interscholastic sports for boys.

TABLE VII
NUMBERS AND PERCENTAGES OF SCHOOLS MAINTAINING CERTAIN INTERSCHOLASTIC
SPORTS FOR GIRLS

SCHOOLS ENROLLING	SCHOOLS MAINTAINING INTERSCHOLASTIC TEAMS FOR GIRLS IN													
	Baseball		Basketball		Track		Tennis		Volleyball		Swimming		Golf	
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent
Under 200 ..	14	5	236	78	41	13	45	15	14	5	4	1	0	0
201-400	6	3	127	66	26	14	52	27	6	3	6	3	1	1
401-600	3	6	26	54	18	37.5	1	2	0	0	1	2	0	0
601-800	2	7	11	41	1	4	15	56	2	7	2	7	0	0
801-1000	1	1	5	6	0	0	7	9	1	1	1	1	2	2.6
Over 1000 ...	4	6.5	23	38	6	9	43	70	2	3	22	3.6	20	33
Total	30	5	428	66.5	92	14	163	25	25	4	36	5.5	23	3.5

TABLE VIII
THE EXTENT OF PARTICIPATION IN CERTAIN INTERSCHOLASTIC SPORTS FOR GIRLS
AS SHOWN BY THE NUMBERS AND PERCENTAGES OF GIRLS TAKING PART

SCHOOLS ENROLLING	NUMBERS AND PERCENTAGES ¹ OF GIRLS PARTICIPATING IN													
	Baseball		Basketball		Track		Tennis		Volleyball		Swimming		Golf	
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent
Under 200 ..	273	30	4544	28	537	18	333	10	279	32	90	31	0	0
201-400	175	—	2737	15	402	11	457	6	183	23	107	—	8	5
401-600	109	14	568	9	145	3	25	11	0	0	20	7	0	0
601-800	127	19.3	512	14	6	2	164	3	104	16	57	9	0	0
801-1000 ...	61	16	253	12	0	0	50	2	69	18	53	14	14	1.6
Over 1000 ..	190	5	583	1	250	6	552	1	100	—	733	3	202	1

¹These percentages are based upon total enrollments in the schools maintaining the respective interscholastic sports for girls.

TABLE IX
NUMBER OF SCHOOLS PROVIDING OPPORTUNITY FOR INTRAMURAL COMPETITION
IN EACH SPORT FOR BOYS AND FOR GIRLS

SPORT	SCHOOLS ENROLLING												TOTAL	
	Under 200		201-400		401-600		601-800		801-1000		Over 1000			
	B	G	B	G	B	G	B	G	B	G	B	G	B	G
Archery	4	10	2	14	1	10	2	6	1	6	2	34	12	80
Baseball	169	152	105	92	48	37	37	34	16	17	68	79	443	411
Basketball	516	446	527	446	205	193	122	102	70	62	225	202	1665	1451
Bowling	0	0	3	6	0	0	0	0	0	0	0	5	3	11
Boxing	8	0	16	0	9	0	7	0	2	0	29	0	71	0
Captain Ball	0	3	0	0	0	0	0	4	0	2	0	7	0	16
Cross Country ..	3	0	5	0	0	0	1	0	4	0	20	0	33	0
Dancing	0	3	0	5	0	0	0	1	0	3	0	5	0	17
Diamondball	16	12	0	0	20	8	3	2	4	3	8	5	54	30
Dodgeball	0	3	0	0	0	0	0	1	0	0	0	0	0	4
Football	62	0	53	0	22	0	14	0	13	0	59	0	223	0
Foul Shooting ..	2	1	4	3	5	2	6	1	2	0	13	4	32	11
Golf	14	3	17	2	19	4	18	2	14	5	63	28	145	44
Gymnastics	7	8	9	8	0	0	4	2	0	1	9	5	29	24
Handball	21	4	12	7	0	0	4	1	4	3	17	3	58	18
Hiking	0	16	0	2	0	0	0	2	0	4	0	6	0	30
Hockey	3	34	8	39	6	27	0	15	3	14	8	84	28	213
Horseshoes	36	12	27	11	17	8	15	6	9	3	37	10	141	50
Indoor Baseball .	0	0	0	0	36	32	22	22	12	13	0	0	70	67
Kickball	0	4	0	0	0	0	0	0	0	1	0	2	0	7
Kittenball	33	32	0	0	16	11	3	3	6	4	7	6	65	56
Life-Saving	1	1	1	1	0	0	0	0	0	0	1	5	3	7
Ping-Pong	3	2	3	4	0	0	3	1	1	0	11	9	21	16
Playground Ball .	38	35	115	96	34	37	16	17	10	5	80	71	293	261
Riding	1	1	0	2	0	0	0	1	0	0	0	9	1	13
Skating	1	4	4	4	1	2	1	3	2	2	2	4	11	19
Soccer	21	40	40	79	16	45	5	24	10	20	25	47	117	255
Softball	28	26	0	0	5	0	0	0	0	0	0	0	33	26
Speedball	10	7	16	11	0	0	7	0	7	0	18	10	58	28
Swimming	24	16	18	20	17	15	12	12	8	14	78	76	157	153
Tennis	146	152	121	129	69	69	50	48	26	34	101	124	513	556
Touch Football .	27	0	23	0	0	0	11	0	7	0	32	0	105	0
Track	182	83	127	110	87	43	48	23	36	19	129	59	609	337
Tumbling	3	3	3	3	0	0	6	6	2	2	6	8	20	22
Volleyball	135	190	152	233	66	101	48	77	21	39	86	154	508	794
Wrestling	8	0	16	0	9	0	8	0	7	0	43	0	91	0

TABLE X
NUMBER OF SCHOOLS IN WHICH INTERSCHOLASTIC SPORTS ARE TAUGHT
IN PHYSICAL EDUCATION CLASSES

	SCHOOLS ENROLLING												TOTAL	
	Under 200		201-400		401-600		601-800		801-1000		Over 1000			
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent
Sports Taught in ..	433	54	385	56	144	57	107	71	53	67	85	33	1207	54

physical education classes. Slightly more than half of all the schools report this practice.

Table XI indicates a remarkably healthy condition with respect to keep-

discrepancy between this table and Table IV which gives a total of 428 schools having interscholastic basketball for girls.

Table XV reveals the interesting fact

TABLE XI
NUMBER OF SCHOOLS IN WHICH RESPONSIBILITY FOR ADMINISTERING THE ATHLETIC PROGRAM IS DELEGATED TO PERSONS OUTSIDE THE OFFICIAL SCHOOL STAFF

	SCHOOLS ENROLLING										TOTAL			
	Under 200		201-400		401-600		601-800		801-1000				Over 1000	
	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent	Num-ber	Per Cent
Responsibility Delegated in	17	2	7	1	1	.4	2	1	1	1	1	.4	29	1

ing the control of the athletic program within the authority of properly constituted officials of the school. Only one per cent report any delegating of such authority to persons outside the school staff.

Table XII reveals the fact that four-fifths of all the schools make some at-

that 47 per cent of all the schools schedule games on nights preceding school days and that 39 per cent schedule more than one game on such nights. Table XVI gives the same facts by states and by enrollment groups. The entire group of schools enrolling from 401 to 600 is omitted in the tabulation. The smaller

TABLE XII
NUMBER OF SCHOOLS WHICH REPORT SOME ATTEMPT TO IMPROVE THE SPORTSMANSHIP OF SPECTATORS AT GAMES AND CONTESTS

	SCHOOLS ENROLLING												TOTAL	
	Under 200		201-400		401-600		601-800		801-1000		Over 1000			
	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent
Attempt to Improve Sports-manship in ..	620	77	548	80	210	80	135	90	73	92	218	85	1804	81

tempt to improve the sportsmanship of spectators at games and Table XIII lists the varieties of ways used to accomplish this purpose. Fifty-two types of activity are reported.

The significant fact in Table XIV is that 134 of 420 schools maintaining girls' interscholastic basketball entered their teams in tournaments. There is a slight

schools of Illinois, Iowa, Kansas and Nebraska follow this practice extensively while Michigan, Minnesota, South Dakota and Oklahoma also have considerable numbers.

Table XVII shows that Ohio has the largest number of schools maintaining interscholastic basketball teams for girls and that Nebraska has none. Arkansas,

Kansas, Michigan and Oklahoma each has over 30 such schools.

To summarize the information presented in this report as it reveals the attitude of the schools toward the North Central standards and recommendations governing athletics in secondary schools, the following statements may be made:

(1) STANDARD 10 is observed by almost 100 per cent of the schools. It is apparent that tournament competition

is largely confined to those meets held under the direct supervision of State Athletic Associations.

(2) The data in tables V and VI should dispel any doubt in the minds of school men regarding the value of interscholastic athletics in the light of recommendation 6a. This recommendation states the aim of interscholastic athletics as extending opportunities for participation to all pupils enrolled so as to

TABLE XIII
PLANS AND METHODS USED TO IMPROVE THE SPORTSMANSHIP OF SPECTATORS
AS REPORTED BY THE SCHOOLS

PLANS AND METHODS	SCHOOLS ENROLLING						TOTAL
	Under 200	201-400	401-600	601-800	801-1000	Over 1000	
Adequate and comfortable seating ..	2	2	0	0	0	0	4
Adequate policing	18	25	10	5	3	11	72
Admonish and punish unsportsmanlike conduct	6	11	0	0	0	0	17
Assemblies	73	177	74	64	40	88	516
Betting and smoking prohibited	5	0	0	0	0	0	5
Bulletins to students ...	5	3	0	0	0	0	8
Cheering for opponents.	8	8	3	3	2	0	24
City cheer-leaders club.	0	2	7	1	3	1	14
Coach and teachers set example for sportsmanship	16	12	0	0	0	0	28
Community pep meetings	1	12	28	0	0	1	42
Courteous treatment of rivals	16	11	0	0	0	0	27
Demonstration games ..	3	0	0	0	0	0	3
Distribute programs to spectators	13	19	0	4	6	7	49
Education of cheer leaders	0	6	0	0	0	0	6
Enforce penalty on team for violations of sportsmanship by supporters	24	0	2	3	2	2	33
Entertainment between halves	9	14	1	2	0	5	31
Explain new rules, plays, and interpretations ..	25	28	1	6	2	4	66
Faculty supervision	32	23	2	10	3	14	84
Give banquet to rivals..	2	0	1	0	0	0	3
Hold coach responsible..	21	1	0	1	4	0	27
Home-room discussion .	17	28	7	23	8	33	116
Instruction through Hi-Y and Student Council .	14	0	0	10	0	0	24
Letters to members of community	5	0	0	0	0	0	5

TABLE XIII (Continued)

PLANS AND METHODS	SCHOOLS ENROLLING						TOTAL
	Under 200	201-400	401-600	601-800	801-1000	Over 1000	
Loud speaker to broadcast during game	0	1	0	1	0	0	2
Newspaper publicity ...	147	135	55	39	20	52	448
Officials rate schools	1	8	0	0	2	5	16
Order campaigns	2	0	0	0	0	0	2
Organized cheering	45	20	4	7	2	0	78
Pep rallies	73	76	0	24	11	0	184
Place sportsmanship first and winning second ..	17	25	0	2	1	0	45
Play reputable teams ..	5	0	0	0	0	0	5
Players set example for sportsmanship ...	22	13	0	0	0	0	35
Recognize examples of good citizenship	18	18	0	3	1	0	40
Respect official's decision	15	9	0	0	0	0	24
Restraining fence	4	7	0	0	0	0	11
Secure high-grade officials	72	53	0	10	5	0	140
Sportsmanship club	10	16	0	0	0	10	36
Sportsmanship and rule books	12	0	0	0	0	2	14
Sportsmanship code	33	27	22	9	0	0	91
Sportsmanship posters ..	27	34	1	7	6	0	75
Sportsmanship talks ...	142	48	0	0	0	0	190
Students set example of sportsmanship ...	78	47	0	0	0	0	125
Student supervision	8	10	5	11	8	0	42
Talks at Rotary and other community groups	15	19	0	2	0	0	36
Talks to spectators	9	0	0	0	0	0	9
Talks to squads	0	0	0	2	0	0	2
Teach sportsmanship in classes	45	39	7	6	8	0	105
Themes in English classes	2	0	0	0	0	0	2
Training of alumni	2	1	0	0	0	0	3
Unsportsmanlike conduct not tolerated ...	25	0	0	2	2	0	29
Varsity letter club	1	0	0	4	1	2	8
Welcome committee ...	3	3	0	1	0	0	7

provide an enjoyable form of recreation in later life. In the first place, very few boys benefit by participation at all, and in the second place, sports which are emphasized such as basketball, football, baseball and track are not adapted as forms of recreation suited to later life.

(3) Recommendation 6b that athletic sports should be taught in the regular physical education classes is observed in 54 per cent of the schools. The least attention paid to this principle, strange to

say, appears to be in schools enrolling over 1000.

(4) Practically no authority in administering games and contests is delegated to persons outside the school staff as suggested in recommendation 6c.

(5) Evidence of general effort to improve the sportsmanship of spectators at games and contests is shown in Table XIII. Only a very few schools reported no effort at all in this line or were satisfied with conditions as they are.

(6) The attitude of approximately one-fifth of the schools is distinctly adverse to RECOMMENDATION 6e which opposes girls' interscholastic competition in basketball. Tables XIV and XVII give the facts on this point.

(7) RECOMMENDATION 6f likewise is observed by only slightly more than half the schools. This recommendation aims to discourage the scheduling of games

2. For purposes of continuing the study of athletic practices in the member schools, we recommend that the following specific questions be incorporated into the annual blank:

a. How many scheduled games did the team representing your school play last year in basketball? How many tournament games?

b. How many basketball games were played last year on nights preceding school days? How many basketball games are scheduled this year

TABLE XIV
NUMBER OF GIRLS' INTERSCHOLASTIC BASKETBALL GAMES AND TOURNAMENTS

Schools Enrolling	Number of Schools	Number Girls Participating	Number of Games	Number of Tournaments
Under 200	238	4424	1908	85
201-400	119	2473	428	44
401-600	23	491	181	4
601-800	11	342	89	1
801-1000	5	253	56	0
Over 1000	24	Not Given	123	0
Total	420	Over 8000	2785	134

TABLE XV
SCHOOLS PLAYING NIGHT FOOTBALL OR BASKETBALL GAMES ON NIGHTS PRECEDING SCHOOL DAYS

NUMBER PLAYING IN	SCHOOLS ENROLLING										TOTAL	
	Under 200		201-400		401-600		601-800		801-1000		Over 1000	
	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent
Night Football . More Than	405	50	353	52	114	45	67	45	28	35	73	29
One Game	344	43	304	44	96	38	55	37	20	25	52	20
											871	39

played at night on nights preceding school days. Tables XV and XVI show the extent of opposition to this recommendation and its distribution among the states.

RECOMMENDATIONS

1. RECOMMENDATION 6c should be incorporated as a part of STANDARD 10. We suggest the following form of statement: "The administration of all athletic contests in the program of accredited high schools should be entirely controlled by properly constituted school officials."

to be played on nights other than Friday or Saturday? How many night football games are so scheduled this year?

3. The committee believes that its work under the present plan of organization has been completed. However, we recognize the need for some kind of study of the objectives and values of athletics both interscholastic and intramural, but we feel that the methods at our disposal are entirely inadequate for such a study. Since there is a committee appointed to work on this problem from the National Federation of State High School Athletic Associations, we recommend the

TABLE XVI
NUMBER OF SCHOOLS IN EACH STATE PLAYING NIGHT FOOTBALL OR BASKETBALL
ON NIGHTS PRECEDING SCHOOL DAYS

STATE	SCHOOLS ENROLLING						TOTAL
	Under 200	201-400	401-600	601-800	801-1000	Over 1000	
Arizona	6	2	Not Given	0	0	2	10
Arkansas	16	8		1	1	0	26
Colorado	8	4		1	0	3	16
Illinois	54	48		9	7	9	127
Indiana	1	2		2	2	4	11
Iowa	28	37		4	2	6	77
Kansas	41	27		3	2	2	75
Michigan	18	29		9	3	11	70
Minnesota	11	20		5	4	10	50
Missouri	13	13		4	1	7	38
Montana	1	0		0	0	0	1
Nebraska	32	22		2	2	2	60
New Mexico ..	4	7		0	0	2	13
North Dakota .	29	4		0	0	1	34
Ohio	11	13		1	2	5	32
Oklahoma	14	19		4	1	3	41
South Dakota .	33	14		1	0	1	49
West Virginia .	18	12		5	0	2	37
Wisconsin	1	10		3	1	4	19
Wyoming	5	5		0	0	0	10
Total	344	296		54	28	74	796

TABLE XVII
NUMBER OF SCHOOLS IN EACH STATE HAVING GIRLS' INTERSCHOLASTIC BASKETBALL TEAMS

STATE	SCHOOLS ENROLLING						TOTAL
	Under 200	201-400	401-600	601-800	801-1000	Over 1000	
Arizona	3	0	0	0	0	1	4
Arkansas	23	12	1	1	0	1	38
Colorado	16	4	2	1	0	0	23
Illinois	4	1	0	0	0	0	5
Indiana	4	6	2	1	0	3	16
Iowa	12	8	1	1	0	0	22
Kansas	28	6	1	0	0	0	35
Michigan	10	6	0	0	0	15	31
Minnesota	2	5	2	0	0	0	9
Missouri	12	6	1	3	1	1	24
Montana	8	0	0	0	0	0	8
Nebraska	0	0	0	0	0	0	0
New Mexico ..	5	2	0	0	0	0	7
North Dakota .	24	1	0	0	0	0	25
Ohio	46	39	10	3	4	3	105
Oklahoma	21	10	2	0	0	0	33
South Dakota .	10	7	0	0	0	0	17
West Virginia .	8	4	1	2	0	0	15
Wisconsin	1	0	0	0	0	0	1
Wyoming	0	3	0	0	0	0	3
Total	237	121	23	12	5	24	422

discharge of this Committee on Athletics in secondary schools so as to avoid duplication and overlapping with the national study.

4. The committee wishes to urge upon member schools the educational advantages of intramural sports in their physical education programs; of refraining from scheduling too many games or of scheduling contests on nights preceding school days; and we urge the continued promotion of good sportsmanship ideals among players, pupils and spectators. Finally, we would place squarely upon

the principals of member schools the responsibility of stamping out the practice of recruiting and subsidizing athletes in their own schools, and of reporting to the athletics committee of the colleges any attempts to recruit high school boys.

Acknowledgment is due the following members of the committee who assisted in tabulating the reports which are summarized in this paper: C. W. Whitten, Chicago; O. G. Sanford, Missouri; R. E. Rawlins, South Dakota; L. L. Forsythe, Michigan; M. H. Stuart, Indiana; and E. R. Stevens, Kansas.

GUIDANCE PROGRAMS¹

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THE past twenty years have witnessed a rapid development of guidance programs in secondary schools. A voluminous literature on guidance has been produced, officers on personnel have been added to the school staffs, and budget provisions have been made for guidance services in some school systems and in many individual secondary schools. Naturally some stock-taking of guidance programs is both desirable and necessary.

One of the projects of the National Survey of Secondary Education had for its purpose a study of guidance programs in city school systems and individual secondary schools reputed to have made significant progress in the organization and administration of guidance services. The report considers (1) the need of guidance in secondary schools, (2) guidance functionaries found in secondary schools, (3) guidance activities carried on in secondary schools, (4) case studies of the school systems and individual schools selected, and (5) generalizations regarding types of guidance programs. Each of these phases will be discussed briefly in turn.

1. *The need of guidance in secondary schools.*—Guidance services on the part of the secondary school are rendered necessary by at least four conditions, namely, (1) the character of the demands for secondary education, (2) the changes in the social and economic order to which the secondary school pupil must adjust himself, (3) the needs of the adolescent for counsel and guidance, and

(4) the necessity of avoiding waste in the process of education.

Secondary education until within recent years has been selective in character and largely individualistic. Now its tendency is general and social. The change has brought about an expanded and enriched curriculum involving differentiation, which requires a program of guidance if the needs of pupils are to be served properly. The problem involved in the foregoing statement can be readily appreciated, when viewed in the light of the increase in course offerings in secondary schools during the past twenty-five years (477 per cent).² The fact that in the same period of time the population of the school districts considered in arriving at the foregoing percentage increased only 66 per cent shows that the change cannot be explained solely on the ground of increased school enrollment.

The adjustment of pupils of high school age to the complex world in which they live is no simple matter. The individual's world today is vastly larger and more complex than it was a generation ago. Important changes in the social and economic structure render both social and vocational adjustments difficult. The rapid shifting of population from rural to urban life has complicated the processes of social and economic adjustment. As a result, the individual at the threshold of his entrance into college or industry and adult community life is frequently overwhelmed by experiences which he does not fully understand and cannot

¹A paper prepared for delivery before the North Central Association in March, 1933.—THE EDITOR.

²G. E. Van Dyke, "Trends in the Development of the High School Offerings, II," *School Review*, XXXIX (December, 1931), 738.

clearly interpret. Since the home is usually unable to provide the guidance needed in the interpretation of many experiences encountered by the youth, the secondary school is compelled to assume the function formerly discharged by the home. If the school fails to assume this function the individual is apt to flounder for want of guidance and may fail to find himself with respect to his interests and capacity or to take full advantage of the opportunities offered in school and society for his growth and development.

The needs of the youth of high school age for guidance are both many and varied. On account of the stage in his development, physical, mental, and social changes may concur which baffle his understanding. The high school age is commonly regarded as a period in the life of the youth of great importance because of the adjustments which must be made. Problems that have to do with the intellectual and physical development, choice of companions, social activities, and the formation of right social attitudes must be met and solved. The school is required to understand the needs of its young people and to provide the guidance service which the pupils as individuals require.

That many schools have not met successfully the responsibilities imposed by the guidance function is evidenced by high percentages of withdrawal in each succeeding year of the secondary school and by high percentages of failure in different subject-matter fields. Recent evidence of withdrawals in secondary schools is furnished in the survey¹ of public schools of Chicago, Illinois in which the remarkable holding power of 98 per cent was found for the ninth grade. The percentage drops, however,

to 78 for the tenth grade, 49 for the eleventh, and 34 for the twelfth. For the same secondary schools the percentage of pupils failing in their work for the semester ending January, 1931 was 12.0 and June, 1931, 11.1. The range of the different schools for the semester ending June, 1931 was from 6.4 per cent to 17.5. Failure data for other secondary schools reveal percentages both greater and less than those cited for Chicago. However, irrespective of amount, failure involves waste in the process of secondary education which can and should be remedied and as far as possible prevented through the effective guidance of pupils.

Data¹ collected in 1927 from a sample group of 522 secondary schools in 41 states ranging in enrollment from 4 pupils to 6,500 show that, according to the judgment of the principals, educational guidance was provided in 87 per cent of the schools, personal guidance in 83 per cent of the schools, and vocational guidance in 74 per cent of the schools. The findings of the sampling indicate that the activities involved in the three general types of guidance specified are carried on in the large majority of secondary schools.

Other data² collected the same year from 336 secondary schools in 44 states, ranging in enrollment from 47 to 4072, regarding specific phases of guidance show that a median of 24.9 activities of guidance with a range of 51 (5 to 56) were thought by the principals to be carried on in their schools. Among the leading activities through which guidance opportunities were provided in the different schools were discipline in 72.2 per cent

¹W. C. Reavis and R. C. Woellner, *Office Practices in Secondary Schools*, pp 109-97. Chicago: Laidlaw Bros., 1930.

²L. V. Koos and G. N. Kefauver, *Guidance in Secondary Schools*, pp. 511-13. New York: The Macmillan Company, 1932.

¹G. D. Strayer, "Secondary Education in Chicago," *Report of the Survey of the Schools of Chicago, Illinois*, 1932, p. 7.

of the schools; (2) oversight of conduct, 74.6 per cent; (3) guidance concerning quality of work, 63.5 per cent; (4) curriculum guidance, 60.8 per cent; (5) vocational guidance, 37.7 per cent; (6) placement, 20.4 per cent; and (7) follow-up service, 13.5 per cent.

The variation in the percentages of the two investigations cited are accounted for by the vagueness of the term guidance. To some persons the term guidance is very general and is virtually synonymous with the process of education. An individual with this conception might consider that curriculum guidance is educational, personal, and vocational in character when evaluating guidance activities according to the three general categories, but as curriculum guidance only and not vocational or personal when evaluating guidance according to specific categories.

The foregoing facts indicate that guidance in some form or other (general or specific) is a well established function in most secondary schools. The activities carried on in secondary schools under the caption, guidance, are extremely varied. In some schools guidance probably means whatever principal or teachers do for pupils in the way of personal counsel or advice. In other schools guidance activities are roughly differentiated into two types, such as educational, personal, vocational, social, moral, and the like. Still other schools analyze guidance into specific activities, such as providing assistance to pupils in choosing curricula, overcoming deficiencies, developing special talents, and cultivating intellectual interests; or imparting occupational information, advising regarding the choice of an occupation, assisting in securing employment, helping in the choice of a college, and giving supervisory oversight to an individual after employment.

Both general and specific activities

of the sort enumerated in the foregoing paragraph are evidently carried on in many secondary schools. In some schools the activities are carried on only informally and incidentally by the regular school officers: principal, deans, and teachers; in other schools they are carried on formally and systematically under the direction of persons specially trained for the purpose and definitely charged with the responsibility of serving pupils through the types of specific activities enumerated.

2. *Guidance functionaries in secondary schools.*—The functionary found responsible most frequently for the assumption of guidance duties in a sampling of 522 schools¹ is the school principal. In 77 per cent of the schools this officer provides guidance for boys, and in 56 per cent for girls. The assistant principals are assigned the responsibility for boys in 32 per cent of the schools and for girls in 26 per cent. Counselors for boys and deans for girls are employed for the purpose in 21 and 50 per cent of the schools, respectively. The guidance functions are delegated to other officers whose titles were not specified in approximately one-sixth of the schools.

Other data of a more specific character reveal a tendency in secondary schools to develop programs of counseling and guidance around different guidance functionaries. The functionaries and the percentage of schools in each of three enrollment groups utilizing their services in guidance programs are shown in Table I. The data show that the principal is the chief guidance functionary in the small schools (under 200) and the homeroom adviser in the middle-sized (200-999) and large schools (1000 and over).

¹Reavis and Woellner, *op. cit.*, pp. 191-97.

3. *Guidance activities in secondary schools.*—The guidance activities carried on in secondary schools are numerous and varied. Analysis of the activities of guidance functionaries made by French² as a part of the Commonwealth Study of Teacher Training resulted in a master list of 180 specific activities which are considered to relate to guidance in secondary schools. An evaluation of these activities by counselors and by experts in education provides classified lists arranged in order of frequency of

are medium (.404 and .316), but in activities involving the collecting and recording of data, and assisting in extra-curricular activities the correlations are low (.265 and .113).

In the school systems and individual schools visited by the members of the survey staff the following prominent activities were observed: (1) instruction of pupils regarding occupations, (2) occupational research, (3) placement service, (4) follow-up investigations, (5) adjustment service between

TABLE I
PERCENTAGE OF SCHOOLS IN DIFFERENT ENROLLMENT GROUPS UTILIZING SERVICES OF DIFFERENT GUIDANCE FUNCTIONARIES¹

FUNCTIONARIES	ENROLLMENT GROUPS		
	Under 200	200-999	1000 and Over
Principal	64.9	53.4	29.0
Homeroom Adviser	21.6	66.0	88.2
Dean of Girls	29.7	45.6	73.1
Dean of Boys	13.5	27.7	46.2
Counselor	2.7	10.2	28.0
Visiting Teacher	5.4	6.8	19.4
Guidance Committee	2.7	4.9	20.4

performance and in order of performance. The correlations between frequency of performance of activities and their relative importance as determined by counselors reveal certain strength and weakness in the guidance activities carried on by the principal and his assistants in the secondary schools. In activities which involved advising with parents, counseling with individual pupils, and advising with pupils in groups the correlations are high, being .767, .742, and .728, respectively. In activities pertaining to cooperation with community agencies and with teachers the correlations

employees and employers, (6) home visitation, (7) preparation of case histories; (8) administration of tests to pupils, (9) preparation of guidance bulletins; (10) presentation of information to groups, (11) individual counseling, (12) case-conferences with groups, (13) sponsorship of pupil activities, (14) conferences with sponsors and teachers regarding individual pupils, (15) preparation of material for try-out courses, (16) organization of guidance clinics, and (17) reports of activities to administrative officers.

Other guidance activities closely related to those enumerated were observed in the school systems and individual schools studied. These activities are considered in the case reports in which the activities were best exemplified.

¹Adapted from Koos and Kefauver, *op. cit.*, p. 516.

²Fanny French, *An Analysis of Activities Involved in Pupil Guidance*, pp. 30-41. Unpublished Master's thesis, Department of Education, University of Chicago, 1926.

4. *Case studies of guidance programs in school systems and individual schools.*

—The school systems of which case studies were made are Boston, Chicago, Providence, Cincinnati, and Milwaukee. The activities featured in the case reports are: (1) vocational guidance in Boston and Chicago, (2) personnel research, orientation, and counseling in Providence, (3) occupational research and counseling in Cincinnati, and (4) life advisement in Milwaukee. The activities specifically considered in the five reports of guidance programs in individual secondary schools are (1) guidance for continuation pupils in the Milwaukee Vocational School, (2) personnel service through committees in the Joliet Township High School and Junior College, (3) the integrated organization of advisory service in the New Trier Township High School, (4) guidance through administrative officers in the Thornton Township High School, and (5) psychiatric-social guidance in the Township High School and Junior College, La Salle, Illinois.

5. *Types of guidance programs.*—Analysis of the case reports for the five school systems and five individual secondary schools discloses four general types of guidance programs: (1) centralized bureaus of guidance for secondary schools in city systems, represented by Boston, Chicago, and Cincinnati; (2) city school systems with a central guidance organization but the individual secondary school considered the unit in the program, represented by Providence and Milwaukee; (3) centralized bureaus or departments in individual secondary schools, represented by the Milwaukee Vocational School and the Township High School and Junior College, La Salle, Illinois; and (4) central guidance organizations in individual secondary schools which utilize regular officers and

teachers as guidance functionaries, represented by the Joliet Township High School and Junior College, the Thornton Township High School, and the New Trier Township High School. Virtually the same guidance activities are undertaken under the different programs. The chief variations consist in the methods employed in the several school systems and individual schools.

a. *The central guidance bureau in city school systems.*—Principles formulated by the National Vocational Guidance Association¹ in 1921 and revised in 1924, 1930, and 1931 urge the development of a special bureau or separate departments responsible directly to the superintendent of schools for carrying on vocational guidance service. While recognizing the fact that local conditions render impossible the prescription of the exact form of the bureau or department, the activities to be performed are specified and the recommendation made that the activities be performed only by persons possessing the necessary personal qualifications, experience, and training. Obviously, the plan was intended for use in school systems and individual schools of considerable size.

The organization of a guidance bureau makes possible the carrying on of certain guidance activities, such as occupational research, follow-up studies, and vocational guidance in connection with placement in a central office apart from the administrative work of the schools. A staff of trained workers can be maintained who not only perform the office duties incident to guidance but who also visit schools on call and engage in group instruction, group counseling, and individual counseling. They may also give advice to teachers, parents, and adminis-

¹See *Basic Units for an Introductory Course in Vocational Guidance*, pp. 181-94. New York: McGraw-Hill Book Co., Inc., 1931.

trative officers regarding guidance of an unspecialized sort that can be carried on in the schools or homes by persons not specifically trained for guidance work.

The director of the guidance bureau is usually responsible to an assistant superintendent or to the superintendent. The director is expected to formulate the guidance policy of the school system subject to the approval of his superior officers; to organize the bureau or department as a clearing house for problems of guidance, placement, and follow-up; and to provide assistants who can render expert counseling service to schools desiring such aid.

The activities which can be carried on in the schools by the guidance assistants are: group interviewing of pupils in entering classes, individual interviewing of members of the graduating class, individual interviewing of pupils as needs arise, instructing classes in occupations, assisting graduates or pupils required to leave school to secure employment, keeping records of pupils interviewed, visiting employers to enlist their interests and to secure knowledge of the conditions under which employed pupils work, conducting community surveys to ascertain environmental conditions and opportunities for employment, and carrying on follow-up studies of withdrawals and graduates.

The guidance bureau is not expected to provide all the guidance service in the individual schools of the system. The principal of the individual school through his teachers and administrative assistants is expected to aid pupils in the choice of courses or subjects, in the selection of extracurricular activities, in the development of intellectual interests, in social adjustments, in overcoming difficulties in classroom work, and the like. The guidance bureau provides the specialized

service and aids the principal in the organization of the school's guidance program and in the integration of its various guidance activities.

In large cities the staff of the guidance bureau is usually inadequate to provide all the guidance service needed in all the schools.² Some schools of a system will be satisfied with nominal services while others will desire all the service possible for the bureau to render. As a result the guidance programs in the individual schools of a school system often vary greatly in both scope and effectiveness. This condition should be charged largely to the administrators of the individual schools rather than to the central bureau.

The development of the central bureau of guidance in school systems and in large schools makes possible occupational research and the utilization of the findings in vocational guidance and placement to an extent scarcely possible under the other types of programs. However, the guidance activities that belong in the individual schools are likely to be neglected unless complementary guidance programs are developed by the principals of the schools or are projected by the guidance bureau for individual schools. The weakness of the guidance programs under the control of central bureaus is not inherent, but rather the result of the objectives of the bureaus.

b. *The central guidance organization in a city system with the individual secondary school the unit.*—This type of guidance organization places the responsibility for the guidance program on the head of the individual secondary school. A central organization is established to render consultant service to the principals and specialized services to the local guidance functionaries. The plan eliminates the necessity of specific appropria-

²E.g., in 1930-31 Chicago had a staff of 31; Boston, 18; and Cincinnati, 8.

tions in the budget solely for guidance purposes. Guidance is integrated with education and is supported as a vital part of the work of the individual school. The activities of guidance should be differentiated and definitely assigned to officers of administration and teachers properly qualified to carry on the activities assigned.

The administrative officers consisting of principal, vice-principal, deans, director of extracurricular activities, and department heads accept executive responsibility for providing the program of studies, materials of instruction, the record system; admission of pupils to school; classification of pupils; preparation of the school schedule; arrangement of the program of pupil activities; and administration of cases of discipline. They interview parents; administer attendance; record and evaluate credits; and organize, direct, and supervise the functioning of the different members of the school staff. Many of the activities of the administrative officers affect guidance only indirectly, yet unless the relation of administrative activities to guidance is clearly conceived the guidance activities of other workers may be hampered or completely inhibited.

The director of guidance, in case there is such an official, projects the guidance program subject to the approval of the school head. He outlines the guidance activities to be performed by the counselors, homeroom advisers, and teachers, and provides the training needed to carry on the guidance program. He interprets the guidance program to the school and community, carries on research basic to guidance, and performs guidance activities which require types of skill not possessed by other teachers.

The counselors teach the courses in occupations, aid the pupils in the selection of courses, give group guidance to

all the pupils, and counsel with individual pupils in need of adjustment. They may also serve part time as regular teachers.

The homeroom advisers may accept responsibility for the orientation of their pupils, the maintenance of pupil morale, and the development of a wholesome attitude toward the school as a civic enterprise. The advisers keep the records of the pupils, give advice with respect to extracurricular and other social activities, and act as the intermediary for the pupils with administrative and guidance officers and parents.

The teacher must be encouraged to play a large part in the guidance program of the individual school. His interest in the welfare of the pupil is indispensable, if guidance is to bear fruit. He should sense the symptoms of maladjustment in a pupil in the incipient stages, bring the guidance organization to bear on the case, contribute to the diagnosis of the causes of maladjustment, and assist in the application of the corrective or remedial measures advised. Furthermore, the teacher may give specific guidance to pupils in the pursuit of intellectual interests, in the development of proper habits of study, and in the development of the proper conception of the processes of education and the opportunities for education provided through the school.

The foregoing analysis of the activities of the guidance functionaries offers promise of a balanced program of counseling and guidance for the individual secondary schools of a city system. The neglect of any of the important phases of guidance, either through failure to give them proper emphasis or through failure to assign them to the proper guidance officers for performance, may contribute to maladjustment and failure on the part of pupils.

The central organization is responsible for encouraging the development of complete programs of guidance in the individual secondary schools. The chief official of the central organization may be, an executive officer as in the case of Providence, R.I., or a consultant officer as in the case of Milwaukee, Wisconsin. In either case he will likely function in the individual school as an adviser to the principal and an instructor for the other administrative officers and teachers. Through supervision he seeks to develop a guidance program in all of the individual schools in accordance with the guidance policy of the central organization.

Guidance service on a state basis of the type under consideration was proposed at the meeting of the National Vocational Guidance Association, February 21, 1930. A committee on state guidance programs and activities was appointed, which in conjunction with a National Advisory Committee submitted a preliminary report at the meeting of the association in 1931 offering suggestions for the organization of state guidance programs. Thirty-nine states, according to the report of the committee, have appointed representatives to cooperate with the National Vocational Guidance Association and the National Advisory Committee. Nine of these states have launched guidance programs. The committee believes that the appointment of a full-time, trained guidance director, supervisor, specialist or counselor for a school, district, county, or state is greatly to be desired, although not essential at the start. It is often possible to find someone in one of these units who is willing to accept the responsibility for the promotion of guidance work on a part-time basis. The county program is regarded by the committee as one of the most effective devices for developing

a state-wide guidance service. The county superintendent of schools is able through his office to reach all of the principals of a county, whether the schools are under his supervision or not. The county guidance officer is thus able to reach the smaller secondary schools and can give direction and encouragement in the development of guidance programs for the local schools. The state guidance service may be placed under a guidance director or some other member of the state department who can cooperate with the county officer in holding conferences and in distributing guidance material prepared by the state department. The material may be in the form of a syllabus or textbook. The important function of a state-guidance service is the development of guidance programs in the small secondary schools.

In contrast with the central bureau type of guidance program the plan under consideration seeks to develop a complete, functioning program in every school under supervision, rather than a divided program with certain guidance activities carried on by specialists in the central bureau and other activities carried on by specialists only in certain individual schools in which the leadership seeks the guidance service of the central bureau and for which the limited service is available. In one system the cost of the program is considerably greater and in the other considerably less than that of the three cities under central bureau type of organization.

c. *Centralized guidance organization in individual schools.*—In secondary schools in which the principal is the chief executive officer with full power or much autonomy to organize and administer his school, a guidance organization may be effected very similar in character to that of the central bureau type in city systems. The

guidance organization can be made a structural part of the school organization and functional responsibility delegated to the director for organizing and carrying on the guidance activities specified in the school program. The director and his staff many undertake to carry on all guidance activities or he may organize his department to carry on certain activities and delegate to administrative officers and teachers certain other activities retaining supervisory oversight. In either case the possibility of coordinating the guidance activities of the individual school is greater than under the central bureau type of organization for a city system.

The programs of the two schools for which case reports have been presented vary markedly in character, although the type of organization is much the same. Guidance is a department in the administrative organization of each school and the directors are executive officers of their departments with executive authority in carrying on the guidance functions of the school. They may summon individual pupils for conference, administer tests to classes or groups, give advice to pupils regarding the choice of college or occupation, make contacts with business organizations and industry with respect to placements, carry on research investigations designed to facilitate guidance, and cooperate with welfare organizations in the interests of the pupil personnel of the school.

The central organization in the individual school has a distinct advantage over its prototype, the central bureau of the city system, in that its activities are concentrated in an individual school instead of dissipated among a number of schools. In operation it more closely resembles the guidance organizations in city systems which emphasize the individual schools as units; it differs in that it

maintains a staff of guidance officers instead of utilizing regular administrative officers and teachers.

d. *Central guidance organizations in individual schools utilizing regular officers and teachers as functionaries.*—In schools classified under this type of guidance organization the principal or a trained counselor serves as director of the guidance program. Administrative officers and teachers are utilized as functionaries in carrying on guidance activities.

Large secondary schools with large staffs of officers and teachers make possible the selection of functionaries with special aptitude or training for guidance duties and the differentiation of duties along functional lines. The prevailing organization of the guidance work in the large schools is the homeroom plan supplemented by special administrative officers, such as the dean of girls, dean of boys, registrar, director of personnel, director of extracurricular activities, and the like, or class principals, advisory committees, and special counselors.

Through functionaries of the kinds indicated pupils are guided in their choice of curriculums, the adjustment of their schedules, the selection of extracurricular activities, the correction of disabilities, the development of special interests and abilities, the choice of a college or occupation, and in securing placement. Activities of the sort specified are closely related. Unless the school organizes and coordinates the work of the functionaries who perform the activities into a program the guidance services will likely be haphazard and unsystematic.

The data available and the cases reported show great variation in the guidance programs of the large secondary schools. In some schools the guidance duties are assumed chiefly by

homeroom advisers, in others by special officers, such as class principals and committees, in others by administrative officers.

It is scarcely possible for the small secondary school to secure either the full-time or the part-time service of a trained worker in the field of guidance. Its program of guidance must therefore be developed by the principal and carried on either by him or his teachers. An example of this type of guidance program is reported by Proctor¹ for a small rural high school in California. The principal of this high school has developed the following program for his school.

1. A visiting day is provided for the eighth-grade graduates who are to enter the high school the following semester. The graduates spend a day at the high school as the guests of the teachers and student body. They are shown through the building, are given information regarding the program of study and the work of the different departments, and are entertained at a dinner by the high-school pupils.

2. The high school principal visits the eighth-grade schools and secures an individual record of each pupil who is to enter the high school the following semester. The record includes scholastic marks of the pupil, the results of mental and achievement tests in the elementary school subjects, and confidential information regarding the personal history and qualifications of the pupil.

3. During the month prior to the opening of school the principal or the freshman class adviser visits the homes of all prospective freshmen. Notice of the visit is sent in advance and a conference is arranged with the parents and pupils to discuss the plans of the pupil for his first year in the high school.

4. A registration day on Friday or Saturday preceding the opening of school on Monday is held at the school. The pupils come with their parents for a conference with the principal and class adviser. At this conference a tentative schedule for each pupil is prepared and formal registration takes place.

5. Pupils are grouped in ability sections in English and in mathematics.

6. The class adviser continues with the freshmen as adviser until they graduate from the school.

7. The class adviser keeps a record of the pupils and counsels with them regarding their school progress.

8. A six-weeks unit in the civics course for seniors is given over to vocational information.

9. The teachers in charge of physical education for boys and girls have the county school nurse give advice on social, moral, and health programs.

10. The work of the guidance program is carefully supervised by the principal and the work of the different persons responsible for guidance is articulated through the principal.

In either large or small schools a guidance program may be developed for an individual school as an integral part of the educational program. The cost of the program may be either greater or less than that of the central guidance department in individual secondary schools, depending on the elaborateness of the organization and the utilization of administrative or teaching time for separate guidance activities. The evidence indicates that the cost of the guidance program will be less if regular officers and teachers are utilized as guidance functionaries.

The survey report should be valuable both to administrative officers and teachers in providing them with information regarding the guidance programs in use in school systems and individual schools with innovating practices. The data available make possible the comparison of local concepts of guidance with the concepts set forth in the ten case reports, and an evaluation of guidance activities carried on by functionaries in local schools with those reported in the survey. The monograph furnishes concrete material for study and discussion in faculty meetings, and professional reading for individuals desiring a broader view of newer practices in secondary schools.

¹W. M. Proctor, "Guidance Programs of a Rural High School in California," *Junior-Senior High School Clearing House*, V (September, 1930), 14-60.

AN ANALYTICAL STUDY OF COURSES OF STUDY OF NORTH CENTRAL SECONDARY SCHOOLS¹

J. A. CLEMENT²
University of Illinois

THE first general purpose of this study was to ascertain the objectives or aims or purposes which had been set forth in the typewritten, or mimeographed, or printed courses of study received from representatives of different secondary school systems. Under this first general purpose, several sub-purposes were considered. In the first place, an effort was made to determine whether any statement of objectives or their equivalents was explicitly made; in the second place, to note whether the terminologies such as "objectives," "aims," "purposes" or any other phraseologies were used interchangeably and the frequency of such occurrence; in the third place, to observe whether objectives or their equivalents were listed with reference to education as a whole, to "subject groups," to "divisional subjects," or to "teaching units" or other divisional aspects of subject matter; and, in the fourth place, to discover the kinds of objectives or aims which were listed or outlined. Or, stated in another way the first purpose of the study is expressed in the following form:

1. How were the objectives or their equivalents set forth in the courses of study?

- (1) Were objectives or their equivalents explicitly stated?
- (2) Were objectives, aims, purposes or other terms used synonymously?

- (3) Were objectives or their equivalents listed with reference to education as a whole, to subject groups, to subjects, or to teaching units or other divisions?
- (4) How were the objectives or their equivalents characterized?

A second general purpose was to discover the nature of curriculum offerings and their organization. Under this second general purpose, an effort was made, in the first place, to note the manner in which the different subject matter offerings were characterized; in the second place, to observe the form of organization or arrangement of subject matter; in the third place, to ascertain the number of textbooks and reference books used; in the fourth place, to discover the nature of supplementary materials of instruction other than textbooks; in the fifth place, to note any unusual features to which the formulators of various courses of study had called attention. Or to reiterate in another way:

2. What was the nature and organization of the curriculum offerings?

- (1) How were the offerings described or characterized?
- (2) What was the form of their organization?
- (3) What was the number of textbooks used?
- (4) Were supplementary materials used other than reference books?
- (5) Were any unusual features explicitly mentioned by the formulators of the courses?

¹A report made to the Commission on Unit Courses and Curricula in April, 1933.—THE EDITOR.

²A group of graduate students in the University of Illinois assisted in making this study, among whom were J. L. Bower, P. E. Burner, Gertrude Fletcher, E. M. Leamon, and R. M. Phillips.

The method of procedure, and sources of materials used in this study.—A letter of inquiry was sent out in December, 1932 by the Committee to those schools which had indicated, during the previous

year, (1931-32), that some curriculum reorganization or revision either already had been attempted or else was then being contemplated. A copy of this letter of inquiry sent to schools belonging to the North Central Association of Colleges and Secondary Schools is herein submitted.

LaGrange, Ill.

December 23, 1932.

Dear Sir:—

In a preliminary investigation last year, a committee of the North Central Association learned that your school was attempting revision of certain phases of the high school curriculum. A new committee has been appointed to make more intensive investigations as to actual curriculum changes and in so far as possible, to collect outstanding new materials making them available to the schools of the Association.

What printed or mimeographed materials of an original character do you have? Are you willing to submit samples to our committee for examination? If you do not have materials to submit, if your plans are sufficiently developed, will you please write us describing what innovations you are attempting? The more detailed you make such report, the more usable for our purpose will it be.

The committee will appreciate any general comments and suggestions which you may choose to make. Our committee is of the opinion that progress in curriculum development should result from a mutual exchange of materials and suggestions. Address correspondence to G. W. Willett, LaGrange, Ill.

Sincerely yours,

COMMITTEE

Prof. J. A. Clement,
University of Illinois.

Prin. B. J. Rivett,
Northwestern High School,
Detroit, Mich.

Prin. A. L. Spohn,
Central High School,
Hammond, Ind.

Supt. G. W. Willett,
Lyons Township High School,
LaGrange, Ill.

The curriculum materials, therefore, received from the different secondary schools in response to the letter of inquiry sent out, in December, 1932, were used as the sources of this study.

As may be seen from Table I, the following cities and secondary schools contributed curriculum materials for examination and study: Central City, Nebraska, Central City Junior and Senior High Schools, 1932; Danville, Illinois, Danville High School, 1931, 1932; Dearborn, Michigan, Junior and Senior High Schools, 1932; Fort Smith, Arkansas, Senior High School, 1932; Harvey, Illinois, Thornton Township High School, 1931; Highland Park, Illinois, Deerfield-Shields Township High School, 1932; Kalamazoo, Michigan, Senior High School, 1932; Kansas City, Missouri, Junior and Senior High School grades, 1929-32; LaGrange, Illinois, Lyons Township High School, 1932-33; Little Rock, Arkansas, Junior and Senior High Schools, 1932; Phoenix, Arizona, Phoenix Union High School, 1931; Springfield, Illinois, Springfield High School, 1932, 1933; Topeka, Kansas, Junior and Senior High Schools, 1932-33; Tulsa, Oklahoma, Central High School, 1931, 1932, 1933; Winnetka, Illinois, New Trier High School, 1930-32; Wheaton, Illinois, Junior and Senior High Schools, 1932.

An abbreviated summary of the general nature of the materials received from each of these schools may be observed in the last column of Table I. It will be noted that the amount of material received from the different schools varies considerably. Five cities contributed much more material than the others, which are represented. Practically all the high school subjects are in part represented one or more times.

Recognized limitations of this study. The scattering or spread of the schools involved in this study is represented by nine different states, sixteen different school systems, and over one hundred courses of study within the North Central Association area. It will be seen that

the number and distribution of schools is not such as may be said to be really representative of the North Central Association territory. Not enough schools are included to make them representative of state situations as a whole. In a number of the respective school systems, the curriculum materials made available to the Committee were not fully representative. Furthermore some of the best materials now in actual use were not available for distribution. Some of the materials received cover only parts of a subject, others are more complete. As previously suggested some general idea of the range of variation of the content may be gotten by noting the last column of Table I. Keeping in mind the actual amount and range of material received by the Committee, no claim can be made that this study is truly representative as a whole of the schools belonging to the Association. The only claim that can be made is that certain tendencies are reflected within a limited number of school subjects, within a limited number of school systems located in the North Central Association regional area.

The chief emphasis in this study has been placed on a *descriptive analysis* of the objectives or their equivalents, and of the curriculum offerings and their forms of organization. Except by indication no attempt has been made to evaluate the courses of study. The Committee believes that a further step is necessary in order to make this study more complete and significant, namely a re-effort first to collect a wider sampling of courses of study and then to attempt to appraise or evaluate curriculum aims and content now in vogue among the secondary schools of the North Central Association. As previously indicated, the number and nature of curriculum materials represented by the schools included in this study are too few to afford a basis

for any *final generalizations*. Nevertheless, certain trends or tendencies, both desirable and undesirable, do appear in this limited array of published materials of instruction.

FINDINGS PERTAINING TO OBJECTIVES

During the last decade or more the question has often been raised, What should be the relation of aims to subject matter taught? It was thought to be pertinent in this analysis to note whether the relation between the objectives or aims set up, and subject matter offered, was explicitly stated or not. Again at different times, different writers have raised the query as to whether objectives, aims and purposes should be used synonymously or not. Some writers have given an affirmative answer to this query, others a negative. At this juncture, no opinion is expressed on this matter. A statement only of the findings is here recorded. Later on in this study, an opinion will be expressed.

Were objectives or their equivalents stated?—Based on columns two and three of Table I, the following statements are made in terms of findings. Nineteen courses were represented by four schools in the field of commercial work offered. In case of seventeen out of the nineteen courses objectives or their equivalents were stated. In English, eight out of ten courses in eight different schools stated objectives, or aims or purposes; in case of foreign language (Latin, German, French and Spanish) all of the eleven courses from five schools were accompanied by objectives or their equivalents. One school reporting two courses in geography showed one course accompanied by objectives; from seven schools, nine courses out of ten were accompanied by objectives, in the field of history and social studies; twenty out of the twenty-five courses, in practical arts, reported

TABLE I

LOCATIONS AND NAMES OF SCHOOLS, AND THE GENERAL NATURE OF CURRICULUM MATERIALS

Locations of Schools	Names of Schools	Dates of Publications	Form in Which the Material Appears	Names and General Nature of Publications
Central City, Nebraska	Central City, Jr. & Sr. High Schools	1932	Typewritten	An Experiment with Differentiated Assignments (American History)
Danville, Illinois	Danville High School	1931, 1932, 1933	Mimeographed	Courses of Study in Art, Biology, Business, Chemistry, Home Economics, English, French, Latin, Mathematics, Physical Education, Physics, Physiology, Social Science, Spanish
Dearborn, Michigan	Junior and Senior High Schools	1932	Some Mimeographed Some Printed (Industrial Arts)	Outline of Applied Art, Biology (Laboratory Guide) Bookkeeping, Chemistry I, Commercial, English, Home Making, Industrial Education (by A. C. Tagg), Foreign Languages, Merchandising, Related Arts, Shorthand
Fort Smith, Arkansas	Senior High School	1932	Mimeographed and Printed	Course of Study Monograph—Elementary Latin, Chemistry, Practical Cabinet Making, Vol. 1, (by Krieg & Parker)
Harvey, Illinois	Thornton Township High School	1931	Mimeographed (Bound book)	Fundamental Understandings in European History, Including Guide Sheets and Tests (Copyrighted by Clarence Stegmier)
Highland Park, Illinois	Deerfield-Shields Tp. High School	1932, 1933	Mimeographed	Units and Worksheets in English, Elementary Science (for slow moving classes), French, Library training, Mathematics of Everyday Living (for slow moving classes)
Kalamazoo, Mich.	Senior High School	1932	Mimeographed	Physical Education Program, (Sen. H.S., Girls)
Kansas City, Missouri	Junior and Senior High School Grades	1929-1932	Some Mimeographed Some Printed	Tentative Outlines and Courses of Study in Biology, English, (Jr. H. & Sr. H.S.), History of Civilization, Mathematics, Office Practice, (Sr. H.S.), Short-hand, Typewriting.
LaGrange, Ill.	Lyons Twp. H.S.	1932, 1933	Mimeographed	Geography Outline for the Ninth Grade
Little Rock, Arkansas	Junior and Senior High Schools	1930, 1932	Mimeographed	Curriculum and Courses of Study (in all subjects) Curriculum Making (Bulletin I, II)
Phoenix, Arizona	Union High School	1931	Printed Booklet	Agriculture Department Manual,—Live Stock Production, Crop Production, Farm Mechanics, Citriculture, Cooperative Marketing, and Farm Management
Springfield, Illinois	Springfield High School	1932, 1933	Typewritten	Survey of History Courses Offered, Revision of the Courses in Social Science Unit Arrangement of History Courses, Series of Tests.
Topeka, Kansas	Junior and Senior High Schools	1932, 1933 (also 1926)	Mimeographed and Printed	Tentative Course of Study in English, (J.H.S.) 7A, 8A, 9A; Outline for Literature in 7B, 8B, 9B. Course of Study in English for Elementary and Secondary Schools
Tulsa, Oklahoma	Central High School	1930, 1932, 1933	Printed	College Preparatory English III, IV A and B, Col. Prep. Eng. V A and Business Prep. Eng. V A, VII A, B, and C; Col. Prep. Eng. VIII A and B. Plans and Requirements in History IV, V, VI Outlines and Students Guide Sheets (Director of Social Studies by Nelle E. Bowman)
Winnetka, Ill.*	New Trier H.S.	1930-1932	Mimeographed	Reading in Eng. Lit. (Unit-Project Arrangement)
Wheaton, Ill.	Wheaton H.S.	1932-1933	Mimeographed	Biology, Com. Law, Com. Geog., Clothing, Economics, English, Foods, French, Latin, Mathematics, Physics, Steno-typing.

from eight schools, contained objectives or their equivalents; of the two schools reporting two courses in physical education, one contained objectives or aims; in the ten courses in science from six schools all of the courses contained statements of objectives or their equivalents.

From the above tabulation it may be observed that the general tendency is to state objectives, aims or purposes in connection with courses of study. For out of the one hundred and five courses of study represented, eighty-nine mentioned objectives or their equivalents. In case of only one school which reported two courses or more was there a failure to state any objectives or their equivalents. One school showed evidence of having no definite policy as to a statement of objectives, aims or purposes in connection with its courses of study.

What was the usual terminology relative to objectives, aims, or purposes?— In order to discover the actual practice in the terminology employed, courses were classified both under schools and under the respective subject groups. The results of the latter classification are presented in columns three, four, five and six of Table II. It will be seen that the term "objective" was used with the greatest frequency, occurring in sixty-two instances. (In some cases more than one terminology was used by a school and in such instances each was counted whenever it did occur). "Aims" was used in forty-six instances, "purposes" in eight, and "goals" in one instance. In terms of the data presented, then, it will be observed that the phraseology "objectives" occurred with greatest frequency. Both the terms "objectives" and "aims" were employed, however, in case of each of the subjects represented in the study.

The individual schools as well as subject groups were also considered in order

to discover whether the practice was to use any one of these terms exclusively, or whether the tendency was to use some of them interchangeably. Only one school which reported more than one course of study used any one of the terms exclusively; six schools used two of the terms; two schools employed three of the terms.

From the data presented in Table II, it may be observed that the term "objective" was mentioned in case of more than fifty per cent of the courses outlined; "aims" in a little less than forty-five per cent, and "purposes" in about five per cent of the instances. Indications were that there is a tendency to use the terms "objectives," "aims," and "purposes" interchangeably, though the data here submitted are probably too limited as well as too indefinite on which to base any final conclusion.

In what way were aims qualified or characterized in the courses of study?— The data shown in Table II indicate that in three instances objectives or aims or purposes, were given in terms of "general" pertaining to education as a whole.

Under the "subject group" aims were stated eleven times as "general," and five times they were not qualified at all, and two times given as "specific." This is to say, that out of a total of twenty-one characterizations made under the subject group, a little over half were designated as "general."

In case of forty-nine instances, objectives or their equivalents were stated with reference to the divisional "subjects." Out of these, eleven were characterized as "general" and thirty-two were not qualified and four were given as "specific." More subject aims were listed as qualified, in case of science, than in any other subject, and in commercial work twelve of the thirteen aims were not qualified. When considering the objec-

tives or their equivalents for both the "subject group" and the "divisional subject" twenty-two out of a total of seventy statements or about one-third were designated as "general" and thirty-seven or over one-half as not qualified. It may therefore be observed from these data that the general tendency is either to characterize aims under the "subject group" and under the "subject" either as "general" or else not to qualify or characterize them at all.

Objectives or their equivalents were found to be stated less frequently in connection with "units or other divisions" than in case of "subject groups" and divisional "subjects." Out of fifty-three instances in which aims were listed in connection with "units," seven were characterized as "specific" and seven as "immediate" and thirty-seven were not qualified at all. A statement of objectives occurred more often in case of foreign languages than in any other subject group. On the basis of these data available it will be observed that the most frequent practice is not to qualify or characterize in any way aims whenever given in connection with "teaching units" or other sub-divisional aspects of subject matter. The last item in Table II refers to the fact as to whether any statements were made by authors or formulators of courses of study of the relationship between objectives stated, and the subject matter offered. As can be seen from the last column, in eighty-six instances no statement concerning such relationship was found, as over against five instances in which an explicit statement was found. The remaining instances were too indefinite to determine the practice with accuracy. The observation may be made that little tendency was found to exist to include a formal statement of the relationship between objectives given and the course of study material offered. Of

course, it may be true that in some instances some schools may have incorporated such a statement in other published curriculum materials but which were not made available in this study.

Sample list of objectives or their equivalents given in connection with subject groups, subjects, and teaching units or other divisions.—It is impossible to submit a complete list of objectives, or aims or purposes which were outlined in connection with the subject groups, subjects, or teaching units. By actual count it was found that several hundred were listed. A limited sampling is presented with no attempt to make any final appraisals of the same. In fairness to every one, perhaps, the complete array ought to be submitted. But without reference, therefore, either to their frequency of occurrence or to the sequential order of their importance or to their validity or defensibility, a limited number of objectives which were found to be stated are herein submitted. In some instances a verbatim report is given, and in other instances, faithful paraphrases are made, of the objectives or aims found to be listed.

UNDER COMMERCIAL SUBJECTS—The following are given under divisional subjects, not under the subject group of commerce as a whole.

In commercial law: To develop the ability to seek legal advice, or to find and apply useful reference materials, or to appreciate legal principles, or to reason and arrive at correct conclusions.

In commercial geography: To enable pupils to interpret the industrial, social and economic contacts of one's environment, to help pupils in the type of thinking most often utilized in everyday problem, to give pupils the more outstanding facts of geography.

In bookkeeping: To provide an opportunity for students to become better acquainted with the principles as well as routines and methods of modern business, to cultivate an appreciation of the significance of business in modern society, to give an introduction to the nature and use of journals, to develop habits of accuracy,

neatness and speed, to develop the thinking and reasoning faculties of students.

In business administration and office practice: To furnish an understanding of how business is organized and operated; to study functional classifications of business; to train students to understand office procedures, and prepare for clerical positions, to arouse a feeling of pride in doing work which will satisfy the standards required in good business; in salesmanship to give a knowledge of the various forms of retail stores and of the importance of the retailer's function, to create a sense of the duties and reciprocal responsibilities of employees and employers; under office practice to appreciate the significance of statistical procedures, graphs, and so forth, to understand the nature and importance of the filing department.

In shorthand and typewriting: To give students the underlying principles, to appreciate shorthand as one means of expressing ideas, to master the analogical basis for constructing shorthand outlines quickly, to develop a rapid accurate mastery of taking and transcribing dictation, to strengthen habits of perseverance, concentration, neatness and accuracy, to instruct students in the use of the most desirable forms, letterheads and so forth used in offices, to develop proper attitudes when actually filling positions; in shorthand to teach the four oblique curves and their circle joinings, to become able to perfect the mastery of skills in taking dictation, to extend word building principles, to attain correct habits and proper techniques in typing.

UNDER ENGLISH AS A SUBJECT GROUP:—To enable the student to realize the richness of their heritage of books, to develop standards of taste and judgment through acquaintance with the field of literature, to enable pupils to think, listen, read, talk and write with a high degree of intelligence and proficiency, to give pupils a respect for our language as a national heritage.

In language and composition: To enable students to acquire a good command of oral and written expression, to develop clearness and accuracy of expression, to further the capacity to think clearly, to enlarge one's interest in a wider range of composition topics, to develop an appreciation of originality and sincerity in the short story.

In reading and literature: To develop high ideals of life, to add to the student's general knowledge an appreciation of different types of authors and of literature, to give the pupil a careful training in reading, to build up good reading habits independently as well as in compliance with prescribed lists, to assist pupils

in seeing that literature is the expression of the soul of the race, to furnish a basis for judgment of the literature of today, to develop an appreciation for good literature, to lead pupils to recognize the beginning of new tendencies and to trace in the works of some authors the interplay of the old and new tendencies, to help pupils recognize different points of view reflected in politics, social customs, religion, etc., to appreciate the esthetic aspects of life pointed out by such writers as Ruskin, to develop the ability to converse on topics of literary interest.

UNDER UNITS OR TEACHING DIVISIONS IN COMPOSITION:—To increase correct sentence control, to improve in the ability to punctuate, to develop skill in writing compositions, briefs, completed arguments, etc., to learn to select and to organize or arrange materials, to develop ability in the presentation of materials that will arouse interest in, and be understood by, different audiences.

UNDER FOREIGN LANGUAGES AS A SUBJECT GROUP:—To acquaint pupils with facts concerning the history, language and different customs and institutions of the different nations, to open up a field of interest that lends zest to such leisure and life interests as reading and travel, to foster an intelligent, sympathetic attitude with reference to other peoples, to enlarge the scope of one's English vocabulary, to develop an appreciation of the structure and development of language, to develop habits of study, thinking, and will training, to develop skill in the use of the eye, ear, hand, and vocal organs in reading, writing, speaking, and understanding a language.

In Latin: To increase a knowledge of facts about the life and institutions of the Roman people, to acquire a larger English vocabulary and a more accurate use of the same based on words derived from Latin, to enable one to understand Latin as a language, to increase the student's knowledge of English grammar, to give a knowledge of the grammar and structure of the language.

In French: To acquire a knowledge of the customs, life and ideals of the French people, to increase a knowledge of the derivations and meanings of English words and of the relationship between the French and English languages, to enable individuals to read with understanding without translation into English, to develop some ability to speak French, to give a knowledge of grammar and syntax of the language.

UNDER UNIT TEACHING DIVISIONS IN LATIN AND SPANISH:—To master the vocabulary and

elementary syntax as tools for translation, to gain a knowledge of Roman history from Romulus to the time of Caesar, to express the author's thought in polished English, to acquire a reasonably accurate pronunciation, to write the language with a minimum of errors, to acquire a grammar knowledge of the subject, to acquire a knowledge of the temperament of different peoples, to acquire the ability to understand when spoken to.

UNDER HISTORY AND OTHER SOCIAL STUDIES AS SUBJECTS—

In American history: To increase a student's knowledge concerning fundamental institutions, to increase the consciousness that United States is a member of a family of nations, to discipline the memory, judgment, and imagination, to give a practical knowledge of everyday life, to aid the student in adapting himself intelligently to his social, political, and economic environment, and to face problems with self reliance.

In European history and history of civilization: To show what European institutions and ideals were transplanted to the new world and how this affected America, to develop historic mindedness as free as possible from narrow prejudices, to develop an attitude of openmindedness in judgments passed, to be able to name the forms of imperialism, to appreciate the development, continuity and unity of the history of the world, to develop ability to the present through a knowledge of the past, to acquire an interest in and a feeling of responsibility for community and world relationship, to become more proficient in the use of maps, tables of contents, outlines, textbooks and so forth.

UNDER A TEACHING UNIT IN EUROPEAN HISTORY—To portray the life of the clergy, to see the relationship between the Egyptian religion and Egyptian life, to locate the important cities and regions involved in the Persian War, to become acquainted with the men who were the leaders in the production of Greek culture, to contrast the Roman Republic and our own government.

UNITS OF TEACHING IN ECONOMICS—To present outlines of the theories of economics as they are generally accepted, to examine the economic foundations of our national welfare as to how wealth is produced, exchanged, distributed and consumed, to survey the outstanding fields of industry, to demonstrate the best way of applying for a job.

UNDER UNIT TEACHING IN CIVICS—To show the relationship of the individual to various groups, to develop an appreciation of group

life, to see how the pioneers in the health movement contributed greatly to our happiness, to discover and understand the basic divisions of government.

UNDER MATHEMATICS AS A SUBJECT GROUP—To give a foundation for further mathematical study, to give practical, disciplinary, and cultural training.

In algebra: To secure a better command of the four fundamental operations in arithmetic, and to apply these to positive and negative numbers, to develop clear reasoning and training in independence of thought, in advanced algebra to get greater proficiency in work previously covered, and to comprehend such items as radicals, negative and fractional exponents, theory of graphs and quadratic equations, and so on, to present topics that are a necessary preparation for the study of more advanced courses.

In geometry: To broaden the mathematical intelligence in such a way as to improve the pupil's thinking, to provide a basis for surveying, engineering and mechanics, to train in accuracy, industry, and patience.

TEACHING UNIT DIVISIONS IN PLANE AND SOLID GEOMETRY—To facilitate the handling of the straight edge and compass, to become familiar with definitions and principles, to become familiar with theorems about areas, to become accustomed to inductive proof, to master in solid geometry proportions involving volumes, surfaces, cylinders, etc., to be able to prove all propositions pertaining to lines and planes and apply such information in general.

UNDER PRACTICAL ARTS AS A SUBJECT GROUP—To fulfill the seven cardinal objectives outlined by the N.E.A., to satisfy the immediate and assured future needs of pupils, to explore by means of material in itself worth-while the interests, aptitudes, and capacities of all pupils, to interest in school work those pupils to whom academic work does not appeal, to develop the mind by providing constructive problems in materials, which demand vigorous mental reaction.

UNDER UNITS IN AGRICULTURE—To develop the ability of boys to think so that they may be able to solve intelligently the problems which they will encounter in conducting farm mechanical activities, to develop ability to make working sketches, drawings and plans for simple farm structures, to develop the ability of boys to see and appreciate the relative value of project work.

INDUSTRIAL ARTS UNITS FOR BOYS—In the general metals course to acquaint students with representative tools used in metal working

trades, to acquaint pupils with some of the various types of activities possible in the foundry industry, to increase knowledge of the fields of mechanics in manufacturing institutions.

UNDER HOME ECONOMICS TEACHING UNITS— Under foods to develop an understanding of the principles of food preservation, to develop an appreciation of good health and habits that will safeguard it; under household management to develop managerial ability in the home; under clothing to develop skill in the selection of durable, and appropriate fabrics as well as appropriate color combinations, to develop judgment with reference to desirable patterns, to furnish information pertaining to daily and seasonal care and repair of clothing.

UNDER SCIENCE AS A SUBJECT GROUP—To assist in the realization or achievement of the important general objectives of education as a whole, to realize health, make social adjustments, improve economic efficiency, and increase appreciation of esthetic elements of environment, to indicate the future possibilities and applications in the whole field of sciences, to assist in the comprehension of the importance of scientific investigation.

In biology and general science: To know about the human body and its development and care, to develop an interest in the phenomena of life as a whole, to see the differences between plants and animals and the relationships existing between them, in general science to give an introduction to all branches of scientific activity, to aid the student in comprehending the scientific method to some degree.

In chemistry: To show of what service chemistry has been to the nation as a whole, to develop a type of thinking and reasoning that will be of value in later life, to become acquainted with principles that will be of value in later study of the subject, to inculcate habits of neatness, accuracy, observation, honesty, concentration, and usefulness.

In physics: To help the pupil to learn and understand the laws underlying natural phenomena, to discipline the pupil, to develop individual self control, to cultivate the scientific attitude of mind.

UNDER TEACHING UNITS IN CHEMISTRY—To become familiar with the metric units used in scientific measurement, to understand oxidation, to understand the law of the conservation of matter, to gain knowledge concerning the composition of air and its components that will enable individuals intelligently to ventilate a room, build a fire, or adjust a gas flame.

Résumé of the findings in the analysis of the nature and organization of objectives or their equivalents.—A summary statement of findings, conclusions, and problems will be given at the close of this study. But a brief résumé is here made concerning findings pertaining to the nature and organization of objectives, aims, or purposes. In case of over one-hundred different courses of study examined about four-fifths referred to objectives or their equivalents. The term "objectives" was more frequently employed than "aims" or "purposes," the ratio of the frequency of the use of "objectives" to "aims" being about three to two. (In a few instances more than one term was used interchangeably so that the total of columns of four, five, six and seven amounts to more than that of the sum of columns two and three). The frequency of the characterizations of objectives or their equivalents in connection with the "subject group" is about equal to that in connection with the "subject," namely, sixteen and seventeen. Or this is to say, that the practice of qualifying and of not qualifying the aims given under the subject groups, and the "subjects" combined is about equal, there being thirty-three instances of qualified, and thirty-seven instances of non-qualified objectives, aims, or purposes, whereas in case of the "teaching units" qualified aims were listed in only sixteen instances, but not qualified in thirty-seven instances. In comparatively few instances were formal comments found to be made by the authors of the courses of study as to the relationship of aims and course of study materials, the proportion between such statement and non-statement being about one to seventeen. It is difficult to make any single or final generalization relative to the sampling of aims. The following observations may, however, be made: In the first place the

stated objectives or their equivalents are numerous in case subject groups, subjects and teaching units are all taken into account. In the second place, much overlapping and duplication occurs in the nature of the objectives stated under the above named divisions. In the third place, no guiding policy or philosophy common to the different schools appears to have been used in listing the objectives. In the fourth place it is difficult to classify the objectives listed under distinct categories but some of them were primarily informational in nature, some disciplinary, some training in specific skills and performances, some practical, and some a composite of one or more of the above.

Three pertinent queries may here be raised. Do many of these divisional and subdivisive objectives or their equivalents represent chiefly amplified aspects of what is usually included under the large general objectives or life-interests of education as a whole? In how many instances do the objectives listed represent those borrowed or "lifted" from other published lists? Furthermore, would it be possible to formulate among school people an underlying common philosophy in the determination and the characterization of secondary school objectives or their equivalents?

FINDINGS PERTAINING TO THE CONTENT AND ORGANIZATION OF COURSES OF STUDY

As will be noted in the second column of Table III, the nature of the offerings in the courses of study have been indicated. For example the Commercial work was divided into Modern Business and Office practice, Bookkeeping, Shorthand and typewriting. In the instance of English where the composition and literature had not been clearly separated the tabulation was made in terms of the different grades of school work, which

was also done in case of foreign languages. The remaining subjects were listed in terms of divisional aspects of the subject rather than in terms of the subject as a whole, as may be seen from the table.

One problem which naturally arises when courses of study are put on paper, is, how far is it desirable to explain or describe the nature of the different offerings? In the light of this query, an attempt was made to discover whether subject matter was stated in the form of merely enumerated items or topics, or whether it was described and characterized in sentence or paragraph form or in any other way or combination of ways. By observing Table III, it will be seen that in case of the commercial subjects in eleven instances out of twenty-six, sentence or paragraph description was used, and in nineteen instances some other form; in case of English seven instances of mere listing of topics were found, twenty-three instances where sentence and paragraph description was used, and thirty-five instances of other manner of characterization; in foreign languages, three instances of mere numeration, five of sentence or paragraph description, and nine by other practices; in history and social studies two instances of sentence and paragraph description, eight in other forms; in mathematics, one instance of mere enumeration, seven by sentence or paragraph description, and four in other ways; in practical arts, four instances of mere enumeration, eight of sentence and paragraph description, and twenty-six in other ways; in physical education, one instance of mere enumeration, and one of sentence and paragraph statement; lastly in case of science, three instances of mere enumeration, three of description by sentence or paragraph, and five in some other manner. In summary then, it will be observed that on

History and Social Studies	American History	0	0	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
the basis of the data presented the tendency is to characterize by some manner of description rather than merely to list or merely to enumerate the content or subject matter offerings. In fifty-seven of the total of one hundred and forty-four instances considered paragraph or sentence types of description were used.

A great deal of literature has been published with reference to the form of the organization of subject matter. Much of this discussion has centered around the "teaching unit" type of organization, as contrasted to some of the more traditional practices.

The findings of this study relative to the form of the organization of subject matter included in courses of study are presented in columns six, seven, eight, and nine of Table III. In case of commercial work one instance of originally formulated "teaching units," seven based on or borrowed from the newer type texts, six based on the more traditional texts, and thirteen, some other or else combinations of the above; in English three newly formulated "teaching units," and five based on traditional texts, and thirty-three some other plan or a combination of plans; in foreign languages, two instances of newly formulated teaching units, and eight based on traditional texts, and four some other, or combinations of the above; in history and other social studies, four instances of newly formulated teaching units, four based on newer "teaching unit" texts, and three some other plan or combination of plans; in mathematics, on instance of newly formulated "teaching units," one based on newer teaching unit texts, ten on traditional texts, and one some other plan of organization. In practical arts, fifteen of newly-formulated "teaching units," thirteen, based on newer "teaching unit" texts and seven some other plan or combination of plans;

in science three based on the newer "teaching unit" texts, seven based on traditional type of texts, and one on some other plan. The facts submitted show, taking all of the subjects together, that the tendency is to distribute the emphasis on newer formulated "teaching units" and newer "teaching unit" texts about equally, whereas more emphasis is placed on the "non-teaching unit," texts and other types of organization. It was difficult to determine in all instances this element of the form of organized content with absolute certainty. Out of the one hundred and forty-four instances noted, fifty-three were either newly formulated "teaching units" or else based on the newer "teaching unit" textbooks in different subjects. And out of these fifty-three, thirty-six of the "teaching unit" type of organization are found in the fields of commercial work and practical arts, history and social studies being next in frequency.

During recent years it has become customary in many schools to use more than one text, or a number of reference books in any one course. In columns ten, eleven, twelve and thirteen of Table III, are indicated the findings in this study. In case of commercial work, four instances show that one textbook is used, two instances that two are used, and four instances, three, and in fifteen instances four or more; in English, in six instances, a single text is used chiefly, in four instances, two, in eight instances three, and in four instances four or more; in foreign languages, in nine instances, one text chiefly, in two instances, two, in one instance three, and in one instance four or more; in history and social studies, in five instances four or more; in mathematics, in five instances one text chiefly; in practical arts, in one instance one, in three instances, three, and in twelve instances four or more; in science, in three

instances one text chiefly, in three instances, two, and in four instances, four or more.

As probably would have been anticipated, due in part to the nature of the subject matter per se, in foreign languages and mathematics, the tendency is to use one or a very limited number of texts in any one course. The tendency in history and social studies is clearly to use more than one text, perhaps accounted for in part again by the nature of the content in this field. In case of English and science the tendency is shown to vary from the use of one, to two, three, and four texts with somewhat of an equal distribution of the frequency from one to four or more.

In recent years where programs of supervision have been put into practice the problem of supplementary materials of instruction other than textbooks and reference books has been prominent. In case of commercial work thirteen instances are shown wherein supplementary materials are used; six in foreign language; history and social studies, three; and science one. It was difficult to check this item with accuracy since no doubt many of the "instructional supplies" and other "equipment" provided were not fully recorded in the courses of study.

And of course these varied according to the nature of subject matter of respective subjects. So that in commercial work workbooks, Gregg's News Letter, use of pamphlets and magazines, lesson sheets, suggestions and articles by E. W. Barnhardt, M. A. Welch, etc.; in English, reading schedules, grammar charts, lists of spelling, outlines and suggestions on punctuation, capitalization, and so forth, magazines, and work books. In foreign languages, classical journal articles, maps, pictures, readings in English, workbooks; in history and social studies,

maps of all kinds, projects of many types, museum collections, work books, trips to points of interest; in science laboratory materials, models, magazines relating to science, work books.

The last general item to which attention was given in this study had to do with the fact as to whether the authors of courses of study explicitly mentioned what they thought to be unusual features. In other instances, certain unusual features could be detected upon examination of the course of study. In case of four or five of the cities mention was made of unusual features in connection with more detailed outlines. In other instances, a few examples of several hundred pages of syllabi were sent to the Committee. In some instances, supervisors and curriculum directors had outlined with care the courses of study, no special comment being given. From the last column of Table III it will be seen that the tendency was not to mention specifically unusual features.

SUMMARY OF OBSERVATIONS AND CONCLUSIONS, AND CONSEQUENT PROBLEMS

In reacting to the merits and demerits of this study, one should keep in mind that it is not chiefly quantitative in nature, but is an attempt to analyze qualitatively certain aspects of high school courses of study. It is not a complete cross-section survey of representative schools. It is an analysis of whatever material was voluntarily sent to the Committee for examination. So all observations and conclusions should be regarded as tentative based on only partially complete evidence with reference to schools within the North Central Association territory. First with reference to *the nature and characterization of objectives*, it was found that there was

a general tendency to state objectives or their equivalents whenever courses of study were outlined on paper. Objectives and aims and purposes on the whole were used interchangeably. Objectives or their equivalents were more often stated in terms of subject groups and subjects, than in case of education as a whole, or in case of teaching units, and other divisional aspects of subjects. Whenever objectives were characterized, the qualifying term "general" was most frequently employed. On the other hand, the tendency was very frequent not to qualify or characterize at all objectives listed under the subject groups or subjects, and teaching units.

With reference to the results or findings pertaining to *content and its organization*, it was found that content was quite often described in paragraph and sentence form but less frequently than in other ways. There were, however, many instances in which the subject matter was merely a list or enumeration of items. Much of the subject matter was still organized in terms of the earlier traditional practices. But in much over a third of the instances represented the "teaching unit" organization either as originally formulated or else as based on the newer "teaching unit" textbooks was used. This "teaching unit" type is most frequently represented in the newer school subjects, and in history and social studies. With the exception of mathematics and Latin the use of more than one textbook was the general practice. Some significant supplementary materials of instruction other than textbooks and reference books were found. The practice of calling attention to unusual features by the formulators of the courses was not at all general. Many problems arise in one's mind after making a study of one hundred or more high school courses of study. It is debatable whether

an analysis of present practices relative to objectives and content will be a sufficient guide for further course of study theory and practice. Is it possible to make any satisfactory advance in the matter of determining and characterizing objectives unless an underlying philosophy or theory of high school education as a whole can first be formulated? Will it ever be possible for each individual school system to work out its own course of study satisfactorily, apart from such a formulated common theory or philosophy of secondary education? Is it necessary to multiply aims relative to subjects and teaching units, or is it possible to think of many of those so-called subdivisinal aims as amplified as amplified aspects of the large general aims of secondary education as a whole? Is it possible to organize the content of courses of study apart from such a commonly accepted philosophy of education? Should a clear effort be made to distinguish between merely "lifting" or borrowing certain "teaching units" or other divisional topics from textbooks, and between carefully formulated units that will fulfill the most desirable objectives of education as a whole? If it be granted that reformulated objectives or their equivalents, and reformulated "teaching units" or other subject matter divisions are important, will it not be necessary to think of the use of textbooks and reference books in a new way different from the original traditional practice? Would it not be profitable to analyze a much larger sampling of courses of study than the Committee has yet done with the hope of discovering those practices that now seem best to conform to a satisfactory theory or philosophy of education, as well as to discover whether any profitable suggestions might be evolved for meeting the needs of different communities and school systems?

HIGH SCHOOL LIBRARIES AND THE READING OF COLLEGE FRESHMEN¹

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DURING the past three years an effort has been made to discover how the secondary school library might affect the reading interests and habits of college freshmen. The general plan was to compare two groups of college freshmen, one of whom had attended high schools with adequate library service, herein called group A, while the other had attended schools with poor library service, herein called group B. The comparisons were made for reading interest in current topics; for actual reading of recent books, both fiction and non-fiction; and for sources of reading material, whether libraries, book stores, or private libraries.

Returns were secured from three institutions. The first group included 130 men and 70 women registered as freshmen at the University of Chicago, winter quarter, 1931. The second group included 200 men and 162 women, freshmen at the University of Nebraska, December, 1931. The third group consisted of 72 men and 60 women, seniors in Technical High School, Omaha, Nebraska, for the school year 1931-32.

The validity of the study naturally depends on the validity of the distinction between the A and B school libraries. Schools having full time librarians were put in group A (adequate libraries), if their total enrollment and number of library volumes were found above average. Collections of less than 500 volumes or less than 7 books per pupil were rated

as group B (inadequate libraries). Three printed sources were used:

1. "High School Library Study," *North Central Association Quarterly*, III (September, 1928), 246-88.
2. *Statistics of Public, Society, and School Libraries*. U.S. Office of Education Bulletin, 1930, No. 37. Washington: Government Printing Office, 1929. Pp. 365.
3. *Nebraska Educational Directory*, 1931-32. Lincoln, Nebraska: Department of Public Instruction, 1931.

Miss Adah F. Whitcomb, Supervisor Schools Department, Chicago Public Library, supplied the data concerning the Chicago High Schools. The annual reports of high schools in Nebraska to the Director of Secondary Education, Department of Public Instruction, served to cover the school libraries of that state. In addition, letters to the state departments of education in adjoining states and letters to individual schools covered the other schools attended by Nebraska freshmen. Some few students in each group had attended schools on the border line between good and poor libraries. But the comparisons did reveal plausible differences in the reading behavior of the students from the two types of library, which suggests that the distinction was fairly drawn.

First, we compared the reading interests of the groups by the procedure developed by Waples and Tyler in *What People Want to Read About*.¹ The procedure involves the use of a check-list containing a virtually complete list of subjects discussed in general magazines

¹Prepared under direction of Professor Douglas Waples, Graduate Library School, University of Chicago, for the Association's Committee on Library.—THE EDITOR.

¹University of Chicago Press, 1931. Pp. 312.

—excepting fiction, humor, history, and technical subjects. The students of each group were asked to rate each topic on a three-point scale according to relative interest—i.e., much interest, some interest, or no interest. The sum of the individual ratings gave a group rating for each topic. The reliability of the scores was tested by correlating the random halves. Then the scores for the entire groups were correlated to determine the degree of correspondence between the interest patterns of the two groups.

The results from the University of Chicago freshmen showed no significant differences between the subjects preferred by the two groups, those exposed to good school libraries and those not so exposed. The University of Nebraska freshmen, a larger group with a higher reliability coefficient, showed an equally high uniformity in subject interests. The Omaha Technical High School seniors, also expressed the same interests. To learn the relation between environment and subject interests, the A group of Nebraska students was divided into city and small town or rural groups and the scores again compared. Again the correlation was high, indicating similar interests. However, Nebraska is an agricultural state with few sharp divisions between rural and urban life, and wider differences might well appear in an industrial state. Again the group A and group B Nebraska students were divided according to scholastic ability as implied by grade point averages. This time the differences were significant, but not of such a character as to indicate that exposure to a good library had been the primary cause.

The conclusion is accordingly that the subject interests of college freshmen are not noticeably affected by the presence or absence of an adequate library in the secondary school. Doubtless the school

curriculum, the newspaper, the radio, and the general environment combine to render certain topics interesting to the group as a whole. The library provides reading material on the same topics and for some students perhaps intensifies existing interest in a few topics, but does little to develop an original interest.

The second question studied was the amount of reading. The University of Chicago students checked a list of 124 recent books dealing with 62 of the subjects previously rated for relative interest. In this case the groups were too small to be reliable. The group B men and women (i.e., those without school libraries) had read more of the titles than had those of group A. A possible explanation is that many of the titles are not found in high school libraries, and that students in schools with libraries read more in other books.

The University of Nebraska students and Technical High School Seniors also checked a list of 114 non-fiction books, taken from approved high school library lists, and found in one or more of the 17 high school libraries reporting their holdings. All the books were of recent date, twenty-six dealt with science, twenty-eight with history and travel, seventeen with biography, and the remaining titles were divided among economics, useful arts, literature, and fine arts. In addition, a list of 69 fiction books, published since 1900, and recommended in ten or more lists, was taken from Dickinson's *Best Books of Our Time, 1900-1925*. This was checked by the same students to show how much of the book was read, whether read for school credit, and the source from which the book was obtained. Ratings were given for each book, 1 meaning some of the book read, 2 half or more, 3 the whole book. The titles were thus scored for each group to facilitate comparisons.

The correlation of non-fiction titles, which was $.83 \pm .02$ for group A men and $.59 \pm .04$ for group B men, suggests that the school library tends to encourage uniformity in the reading of non-fiction, as one might expect. Also it apparently discourages reading from other sources. The 100 men in group A read 297 non-fiction books which included 72 different titles. The 100 men in group B read only 218 books but these represented 82 different titles. The high school library as now organized appears to limit the number of titles, while it increases the amount of non-fiction read.

To examine the differences in response to school library facilities on the part of good and poor students of each sex, the reading scores were classed by scholarship. Since the divisions were too small to be reliable, the individual scores were compared with individual grade points. It became evident that group A students of low scholastic grade do more free reading than those of either medium or high grades. The group A men of low grades read almost three times as much as the group B men of low grades. The difference was less for the women, yet the mean reading score for group A women of low average was 8.9 as against 5.1 for the group B women of equally low average. One may conclude that when books are readily available in high school libraries, the students of low scholastic grades read more non-fiction than in schools without libraries. An educational influence is at work which school marks do not recognize.

The last part of the study analyzed the sources of reading material for the several groups to discover how the school library compares in importance with other sources. Each student in reporting his reading had indicated whether he had obtained the book from a library, borrowed it elsewhere, or bought it.

The University of Chicago freshmen coming from schools without libraries, used the public libraries less, borrowed a few more books from their friends, and purchased almost twice as many books as did their classmates who had had adequate libraries in their secondary schools. The University of Nebraska students depended on the libraries for their books, turning to the public library only when the school library was inadequate. The group B women purchased and borrowed books to supplement the books secured from libraries. For the fiction the two groups used the libraries, their friends, and the bookstores in about the same proportion.

The college library was used more by the students of group A than by those of group B. This was true for both the University of Nebraska students and the University of Chicago students. Apparently the knowledge of library procedure gained in the high school library helped students adjust themselves at once to the use of the larger college library. This difference, however, appeared to wear off after the first few months in college.

The average number of books read by the Technical High School seniors was higher than that of either college freshmen group. One reason is that 73 per cent of the books on the non-fiction list were found in the library of this school. Another possible reason is the combination of library and study hall in the school, with each pupil spending at least a period a day in the library. The easy access to books encouraged the reading of many books. The amount of fiction read was almost identical for the Technical High School men and women.

The general conclusion is that if the school library has books on recent topics that are attractive, they will be read. For the dull or otherwise poorly ad-

justed student of low scholastic standing, the high school library appears capable of becoming a real incentive toward learning. For the more alert student reader, actively interested in reading and his school work, the high school library is only one of several places to obtain his free reading.

But the most important contribution of the study reported is perhaps its justification of this method of approach. The educational values of the school library can only be appraised by studying different sorts of school libraries *in relation to the students' total reading behavior*.

The present study is, we believe, the first to undertake such an appraisal. Until many more such are made and the results fitted together, we have no satis-

factory basis on which to distinguish good school libraries from bad ones. Until such distinctions become clear, it is almost as unwise to maintain a conventional school library merely for the sake of having one as it is to forego the educational benefits that the good library has been shown to render certain types of student.

Hence high school administrators beset by budgetary worries may safely encourage staff members to determine the amount, character, and source of the reading done by different pupil groups. On the extent and thoroughness of such studies depends the hope of a large increase in educational values through free reading, values that may well cost less than others of less importance to the student population as a whole.

THE VALIDITY OF REGIONAL ACCREDITING STANDARDS FOR SECONDARY SCHOOLS¹

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It is becoming noticeably frequent that someone hurls a critical broadside at the accrediting associations, deploring the burglarization of the schools' "individuality." Dr. Capen has for several years most definitely protested against their concrete standards "in terms of hours, of credits, of degrees, dollars, and things." [8]* Others have reacted similarly, but in the meantime the accrediting programs have gained the greatest of support. The fight to save the individuality of the school has an appealing battle-cry, yet in turning back the pages some twelve or fifteen years another battle-cry was paramount; schools were too different and individual. Young [48], pointing out the lack of uniformity of schools in New England, contended that "in order to correct these defects we must have something more stable than local sentiment on which to build." It has been, on the other hand, a most common charge that because of the rigid standards of regional associations and state accrediting agencies, professionally minded and progressive educators in our secondary schools have been prevented from reorganizing their curriculums to conform to local needs, from adapting newer methods to the school or experimenting on worthwhile educational projects. Whether the tendency should be toward more "individuality," more "standardization," or a middle road is worthy of consideration.

There is no doubt that, as the world in which we live is a dynamic and changing one, the school will always be a changing thing. The accrediting standards have never been, and probably will not be, unchanging measures. Whether they change to allow for more individuality or more conformity it is hard to say; yet, as this is a scientific world, they will remain, fall, or change to the extent that they are scientifically validated or invalidated. That the present standards allow admittance of only the better schools is not to be concluded with finality. Jessup [21] questions it by reporting a study of 92 accredited and 283 nonaccredited schools in which the upper third of the latter were all above the lower third of the accredited schools in performance on subject tests. Whether or not the present standards single out the better schools and raise the efficiency of the poorer ones as the standards permit is a question which invites a review of what scientific investigation has contributed to the validity of prevailing standards.

SIZE OF SCHOOL

Accrediting associations in general will not consider four-year schools of fewer than five teachers, inclusive of a part-time teacher and administrative officer. The implication is that the smaller schools, because of inferior teacher, excessive teaching loads, poor distribution of teacher assignments, limited curriculums, and inferior equipment, or other factors are not as likely to do good work. Relative to the load factor, Frank H.

¹ This article is sponsored by the officers of the Commission on Secondary Schools.—THE EDITOR.

* The figures in brackets refer to the numbered items in the bibliography at the end of the article.

Koos [26], in a Minnesota study, found teachers in schools of less than one hundred pupils spending 7.3 hours daily on their teaching duties, while those in schools of over one hundred pupils were working 7.6 hours daily. A tabular study of teacher-pupil load in South Dakota showed 15.8, 17.8, 17.6, and 19 pupils per teacher in three, four, five, and six teacher schools respectively. The load seemed to increase with the size of the school. Relative to the scholastic ability of the pupils graduated, Jackson [19], in a study of pupil attainments in the University of Nebraska, found little difference between the pupils of North Central schools and the others; with a slight superiority in favor of the "others." Burgraff [7], Stalnaker and Remmers [42], and Odell [34] found correlations between the size of school and student success in college deviating less than .02 from zero. Thornberg [45] at Washington State College and Douglass [13] at the University of Oregon found low correlations between the size of the school and scholastic success slightly, almost negligibly, in favor of the larger schools. Even though limited, these studies suggest that, if success in college is the criterion, the large school is not necessarily the better.

PLANT AND EQUIPMENT

The standards relative to the school plant and its equipment have been indefinite in every respect. Although it is empirically reasoned that schools of the newer type, with modern sanitary improvements, better lighting, better ventilation, and more room are conducive to better results, yet the regional associations have hesitated to specify the definite physical composition of a school to be eligible for accreditation. In the eyes of the scientific experimenter a requirement for "plenum fans" ventilation would not be valid. Numerous experi-

ments show a lack of advantage over "direct-window" ventilation in terms of educational accomplishment and absences due to respiratory ailments. In fact, the study of the New York Commission on Ventilation [33] in 1926 showed many fewer absences in schools having the older ventilation systems.

With respect to laboratory equipment it is, however, the policy of the accrediting associations to require that it be "adequate." To interpret "adequacy" as "equipment for every experiment for every student" can hardly be justified in the light of the findings of Johnson [23], Wiley [46], Mayman [30], Cunningham [10], Anibal [2], Knox [25] and others showing the superiority of the "lecture-demonstration" laboratory with limited apparatus over the "individual-laboratory" method. These indicate that the associations probably will not substitute for "adequate" requirements that will encourage inspectors to count the test tubes and beakers or any to base approval on any mechanical or completely objective inventory of equipment and apparatus.

Scientific investigation suggests there is something more important in determining the difference between good and bad schools than definite building standards.

TEACHING PERSONNEL

The academic teacher in a school accredited by a regional accrediting association must be a college graduate, have had from twelve to fifteen hours of professional courses, and some training in the subjects taught. The North Central Association requires from ten to fifteen semester hours in the subject taught, and the Northwest Association requires a "minor." That these requirements make for good teaching constitutes the major premise of the argument and is no doubt true. However, contributions

of scientific study to verify it are scarce. Knight [24] found a correlation of .608 between teaching success and "knowledge of teaching technique" which would indicate that a requirement for numerous professional courses had some bearing on "good teaching." The studies of Hamrin [16], Moody [32], Clapp [9], Boardman [4], Almy and Sorenson [1], Kriner [27], and Somers [40] are in accord, indicating that mastery of normal school and college courses does correlate significantly but not closely with good teaching. A few studies have been conducted to show the relationship between particular courses and teaching knowledge. Snyder [39] found that practice teachers having had a course in "diagnostic and remedial teaching" obtained slightly better results than those who had not; and Herriot [17] found that judgments of students relative to good teaching improved after a course in "technique of teaching." These lend proof that, with limited exceptions, any educational course taken will have a tendency to improve teaching to some degree.

Hughes' study [18], in which he was not able to find a positive relationship to exist between teaching effectiveness of teachers of physics and the amount of training in that field suggests the need for careful studies of subject matter requirements.

These are not necessarily permissive of defensible conclusions. However, they do indicate that as yet validity is not established for these requirements. The challenge is not to the standard so much as to the investigator for enlightenment, for example, in the relative efficiency of teachers having, say, six, ten, fifteen, twenty, and no hours of professional training (holding experience constant). Statements of subject matter requirements in any exact terms are not inconceivable. The study quoted suggests it

may be subject to question. It is certain, however, that objective validation has not yet been made available.

TEACHER AND PUPIL LOADS

The standards of three of the four principal accrediting associations are similar in that a maximum teaching load should be not greater than six class periods a day, preferably not more than five, with a double laboratory period as the equivalent of one period of "prepared classroom work." The equivalency empirically set is not readily justified. In addition there is considerable basis for doubt of the equivalence of classes in different subject matter fields; that five periods of recitation in English are equivalent to a similar number in, say, mathematics. Frank H. Koos [26] in his study of Minnesota high schools, found quite marked differences in the amount of time spent in activities related to instruction per recitation period. For English teachers it was 89; for mathematics it was 71; the "equivalent" double laboratory period demanded 103 minutes of the instructor's time. Reichard's study [37] of the loads of Minneapolis teachers showed similar differences. "Classes per day" is an insufficient measure of teaching load. Three of the principal associations set a maximum teaching load of 150 pupil periods per day. In the calculation of teaching load, factors other than number of class periods of recitation per day and pupil periods per day should also be considered. They include a consideration of the subject itself, duplication of subject classes, size of class, length of class period, ability of class, and amount of time spent by the teacher in activities, guidance, and study halls.

Douglass [14] has developed a formula intended to furnish a more practical measure of teaching load. It gives consideration to all the more important fac-

tors that affect teaching load. It would seem that such a formula must soon be given serious consideration by accrediting agencies if standards with respect to teaching load are to be continued.

The required teacher-pupil ratio of one to 30, maximum pupil period load of 150, and maximum class periods per day of five, need further careful study in view of the recent investigations concerning class size. Poorly informed individuals have complained most vehemently that the associations refuse to accredit schools that have classes of more than 30 pupils. Dean Edmonson has assumed the task of setting these individuals right. As recently as the December, 1932, issue of the NORTH CENTRAL ASSOCIATION QUARTERLY he again explained the fact that the associations' requirements of a maximum of "one hundred fifty periods per week and not to exceed five recitations daily" was not to be interpreted as a maximum class requirement. It is, however, clear that no one teacher in an accredited school may teach many "large" classes in the maximum of five daily and be within the requirement set forth, and by mathematical computation it appears that, in practice, the adherence to this requirement virtually becomes either a standard of class-size or one restricting the number of recitations daily for any one instructor. As to other accrediting bodies, the New England Association of Colleges and Secondary Schools does have a maximum class size requirement of 30, and the Middle States Association in 1923 showed an inclination to small classes by committing themselves to a policy of accrediting private schools having less than 36 weeks in the school year because of several attributes unique to them; of which "small classes" was one. [36]

The studies in this field render most definitely questionable any class size re-

quirement and most empirically point out the direction that will most likely be taken as far as regional accrediting standards are concerned. The studies available reflecting on class size suggest that such standards are not well founded and that changes in the future must be in the direction of more liberal requirements. In the field of secondary education Cunningham [11], Stevenson [43], Davis and Goldizen [12], Jensen [20], Miller [31], Brooks [6], Hudelson and McGuire [28], Bloomfield [3], and Smith [38] have contributed to the conclusion that, as far as testable knowledge is concerned, pupils in large classes are not at a disadvantage.

Prevailing practice has been to limit pupil loads to four subjects. The North Central Association suggests that only the upper 25 per cent of the students be allowed to carry work in excess of that amount. Such a requirement has not been completely validated and Osterberg's interesting study [35] in the Los Angeles schools indicating that excessive loading of even the inferior students does not constitute a significant cause of failure, is suggestive of the need for further study of this standard.

COURSE OF STUDY

The requirements of regional associations relative to the pattern of subjects which must be required of students are more historical than current. To the extent that success in college is a measure of the success of the high school, just what subjects a student takes has been found to be of no significance. Gebhart [15] found that only in the case of mathematics did the number of subjects taken have any correlation with success in college. Stinette [44] found that, of those students whose pattern of subjects lacked the prescription entitling them to admission to most universities, 40.6 per cent of them did work above the

mean of those with the definite prescriptions. Sorenson [41] and MacPhail [29] found that students having had several years of Latin, mathematics, and French did do somewhat better work in college than those who did not have many units in these subjects. Douglass [13] found that the coefficient of correlation between number of units taken in high school and the average mark made in the first two years of college, holding intelligence constant, was in no subject greater than .12. Yates [47], studying four groups of students, found insignificant relationships between the pattern of high school courses and college success when intelligence was held constant. In one case he found a correlation of .29 between the number of units of mathematics and college success. In most cases the correlations were within one-tenth of a point from zero. One conclusion is warranted, that sufficiently significant correlations do not exist to justify specification today, and with tomorrow being prophesied, changing standards will be in the direction of freer and more liberal courses of study if scientific justification is desired.

SUMMARY

The studies available seem to raise important questions concerning the standards of accrediting associations. The conclusion is that such studies, as have been conducted, suggest definitely the need for further study of the validity of the standards it has been the practice of regional associations in the past to set. There are also some standards which have not been the subject of investigations. They are more or less traditionally accepted and have never been seriously questioned. The length of the school year, week, and day are of this group. These may soon be questioned in the light of our present social and economic trends.

Of such uncertain validity are accrediting standards, that attempts have been made to accredit schools on bases other than concrete standards. The New England College Entrance Certificate Board approves schools on the basis of the success of students in college, and have continually professed the success of this policy in spite of the obvious limitations of such a practice as applied to any but the large schools which send to college a sufficient number of pupils to furnish the basis for reliable judgments. A frequent proposal in states where the university has assumed the "accrediting" of private schools has been that it be done on the basis of some type of achievement test. Paul Boyd [5], believing in the practicability of such a method, sent a questionnaire to a number of psychologists. In answer to the question, "Do you think that we have reached the stage where it would be advisable to use attainment tests in the business of accrediting high schools?" thirty-eight answered "Yes" and eleven answered "No." The recommendations varied from the proposal that the testing method constitute the sole basis for accrediting to one in which it should be merely supplementary. The almost inevitable overemphasis which such a practice would cause to be placed upon those outcomes of instruction which are testable in written examinations, is so undesirable as to cause most students of secondary education to hope earnestly that some other way out may be found. Not only is the problem one of peculiar importance today in the light of the need of greater emphasis upon the development of character—ideals, attitudes, and interests—so apparent, but the great probability that the employment of such a method would result as in the case of the New York Regents Examinations and in the states where state scholarship contests have become

prominent in unfortunate balance in the courses of study and in reducing teachers to the status of coaches, feverishly drilling students in the temporary mastery of subject matter information and skills.

Although it is contended by many that revisions, substitutions, or supplementary criteria are needed, yet a less radical conclusion would be that, in the light of the present studies, more thorough testing of our present standards is greatly

needed. At the present time the North Central Association is in the midst of a large scale study of the standards of college accreditation. A similar study applied to secondary schools to determine the extent to which partial or complete compliance with each standard tends to make the school concerned a better and more desirable school, such as is now being undertaken, should prove of great value to secondary education.

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CURRICULUM REVISION IN DETROIT HIGH SCHOOLS¹

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ONE of the important problems of the secondary schools in the next decade will be to formulate curriculums and to reorganize the subject matter for those pupils who have not the ability to master the subjects in the college preparatory and the commercial curriculums. The chief reason for this immediate problem is the economic situation which has forced into the secondary schools thousands of people who formerly left school at the age of sixteen or seventeen to go to work. There are no jobs for them now and there will not be for some time to come. A second reason for the influx of low ability pupils is the policy of many school systems of promoting pupils according to their chronological ages and not according to their achievement. These misfits are in our tenth grade now and we must adapt our instruction to their ability.

What have we done in Detroit to solve this problem? To understand our situation, it is necessary to explain the curriculums in the Detroit cosmopolitan high schools. There are three chief curriculums, namely, the college preparatory, the commercial, and the general. There are also several less prominent other curriculums.

The Detroit high school pupils choose one of several curriculums according to their vocational and educational objectives. Those going to college choose the college preparatory curriculum; those planning for office work choose the commercial curriculum; those interested in music, art, home economics or industrial

arts choose a curriculum arranged to give them specific training in these subjects. Several years ago, the general curriculum was arranged to take care of pupils that had no particular objective or that were unable to meet the rigorous demands of the college preparatory and the commercial curriculums. On account of the high percentage of failure among tenth grade pupils, we found that the general curriculum was not providing the right material for these pupils of low ability and therefore last October the Assistant Superintendent of Schools, Mr. E. L. Miller, appointed a committee to study this problem. The following is the report of that committee, made under eight categorical headings:

SPECIAL COMMITTEE REPORT

1. The formulation of the objectives of education as set up by the N.E.A. Commission on the Reorganization of Secondary Education is adequate to our present needs. This formulation is as follows:

- a. Health
- b. Command of fundamental processes
- c. Worthy home membership
- d. Vocation
- e. Citizenship
- f. Worthy use of leisure
- g. Ethical character

2. Theoretically, pupils who are admitted to high school have attained a command of the fundamental operations. This would imply that the emphasis in high school should be upon the other six objectives. As a practical matter, there are now many who must be passed along to high school from the elementary and intermediate schools who need further work upon the fundamental operations. Such work should be from a new angle rather than mere repetition of elementary courses. As an illustration, spelling might be taught by combining the assignment with one of arranging words in strict alphabetical order as for filing.

¹ A paper read before the Commission on Unit Courses and Curricula in April, 1933.—THE EDITOR.

3. Subjects must be made available in the high school program of studies, methods of teaching must be devised, and the high school must be so organized that these remaining six objectives may be realized. No one of these can be neglected in the General Course, and the second one will need emphasis in a new way for pupils of the low levels.

4. In the selection of subjects for the program of studies, in the arrangement of curricula, and in the adaptation of method, the following factors must be given consideration:

a. The individual differences of pupils in ability and aptitude.

b. The individual differences of pupils with respect to educational and vocational destinations.

An implication of these theses is that the General Course must provide a considerable number of subjects in each semester's curriculum, with suggested groupings of these suited to the abilities of the pupils. Music, art, shop, home economics, and home science offer possibilities.

5. Each subject of instruction must be critically evaluated with respect to its contribution to the achievement of one or more of the above objectives.

6. The complete program of studies must be evaluated to determine:

a. Whether the necessary subjects are being included and the appropriate methods are being used to assure the attainment of each objective, and

b. Whether certain objectives are not being grossly overstressed and others grossly neglected.

A suggestion for consideration under this thesis is to determine whether sufficient education is provided for the objectives, "worthy use of leisure," "citizenship," and "ethical character." The shortened working day means more leisure time. This would seem to imply that we must give greater attention in secondary schools to the objective "worthy use of leisure." This may go beyond even the General Course, and be a matter for consideration for the College Preparatory and Commercial Courses.

7. The contribution of a rich and varied program of extracurricular activities to the attainment of many of these objectives should not be minimized.

8. The organization and conduct of the school must contribute to the realization of these objectives. The fifth objective, citizenship, for instance, implies that pupils be given an opportunity to learn through sharing the social responsibilities of the school.

This ends the report of the special committee which has made several valuable suggestions. Detroit has already devised several curriculums which are modifications of the general curriculum and which are designed particularly for the group under discussion. These are music, art, home economics, technical, and mechanical curriculums. In addition, several new subjects were offered in the tenth grade of the Northwestern High School this semester for the first time. They are as follows: general language, general science, lettering and general business science. In addition, "special" or "Z" English classes are offered in several high schools. To quote the Director of Language Education, Marquis E. Shattuck:

"The modification of the course of study thus far has been more quantitative than qualitative. For example, the number of classics or books to be read in a given semester has been reduced for pupils of lower ability. The number of compositions required is reduced likewise for these pupils. In type of material, however, considerable modification has also been made. For example, the amount of grammar for slower pupils has been reduced materially; written composition is restricted to but little beyond letter-writing. In literature where the more able pupil reads Shakespeare's *Julius Caesar* the slower pupil reads Lamb's *Tales from Shakespeare*; or Pyle's *Men of Iron* in place of *Ivanhoe*; Colum's *Story of Ulysses* while others read Palmer's *Odyssey*.

Some high schools may be interested in the experimental class in general language conducted by Mrs. Ella B. Adams last semester. The aim was to improve the knowledge of English of low ability tenth grade pupils. Twenty-three were enrolled in the class and twenty passed the course. The class procedure is reported by Mrs. Adams as follows:

The textbook was not taken from the class room except for occasional reviews. A reference shelf was kept available in the library to be used by all. Short, definite, oral reports were assigned almost daily. These reports served as a basis for class discussions with contributions from other pupils and the teacher. When the unit had been covered, sufficient time was allowed in class for writing the answers to the questions asked in the text. This gave a splendid opportunity for a general review.

Few of the pupils read well or cared to read. To arouse an interest in reading we kept a few easy books on pertinent subjects in the class room. These were advertised as attractively as possible with the promise that no one need report in class on what he read unless he wished. After the first few weeks these books were always in demand.

Frequent tests were given of the combined short answer and story types. Lists of words misspelled in these tests and other written work were kept for study and spelling practice. Pupils were discounted for misspelling of these words in subsequent work. Errors in grammar and punctuation were likewise noted and studied. The teacher encouraged the pupils to bring in difficult problems from their English classes and we had much fun working on them. This became a very practical part of the course.

We spent much more time than the course indicates on historical background. For example, the study of the development of the alphabet and writing took us around the Mediterranean countries. We stopped at each to learn about the nature of the people, their customs, and their contribution to world civilization. Three weeks were spent on Roman history. This kind of content lends itself very naturally to discussion of ethical character, ideals of citizenship, etc.

At first the children were restless, inattentive, and, it appeared, lazy. An entirely new attitude had to be developed. It took much time, patience, and firmness to make them realize that the class would have definite standards within their ability and that they must reach these standards if they were to pass. Every pupil was caused to feel that he could and was expected to contribute something each day to the progress of the class. All this was a new experience to most of them and it was very satisfying to see them grow in interest and alertness and, I believe, in happiness.

The class showed an increasing interest in the tests which they at first disliked. They attributed the improvement in their marks to

the fact that they were learning better how to study, and also (which is very significant) to the knowledge that "they had to get it or they wouldn't pass."

Overlearning is very essential to this type of pupil. He does not seem to resent reviews and drills as much as the brighter student.

There should be close correlation between the general language and English classes and the teachers should make their problems mutual. General language can also be correlated at least during the first term with geography.

I was very pleasantly surprised to find the pupils' liking for the German we studied and their anticipation of the other languages to come next semester. At that time we shall also have more English grammar and intensive dictionary study with word derivation, prefixes, suffixes, etc.

General language owes its strength to its flexibility and adaptability. There should be no set amount of ground to cover. If allowed to motivate itself the class will take the teacher into many unexpected and worth while bypaths. This vitalizes and gives it a peculiar value for reaching the individual needs of the pupils.

Another phase of the subject may well be mentioned at this point, and that is the changes which have occurred in the past two years in election of subjects in Detroit high schools. The reasons for these changes are (1) the action of the Michigan Legislature requiring Civics for graduation, and (2) the action of the Board of Education requiring Economics for graduation.

The Michigan Legislature at the 1931 session passed a law requiring one-half year of Civics for graduation, effective in June, 1933, and the Detroit Board of Education made Economics a required subject effective at the same time. Both Civics and Economics have been elective subjects in the eleventh and twelfth grades for some time, but these changes increase the requirement in social science to three years. This has decreased the elections in foreign languages, chemistry, physics, and the higher courses in mathematics. In the Northwestern High School, during the past two years, there

was a decrease in mathematics of 19 per cent, in foreign languages 20 per cent, and in physics and chemistry 15 per cent. The total increase in the social sciences in this period was 90 per cent. These figures illustrate the marked effect of the change in the state and city requirements for graduation.

Conclusion. This report is little more than an outline of the problem and we recognize that much remains to be done. Low ability pupils will be with us in increasing numbers. Elimination by failing them is no solution of the problem. We must find subject matter that is adapted to their ability.

A DISTINCTIVE TRAINING CURRICULUM FOR JUNIOR HIGH SCHOOL TEACHERS

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THE junior high school has no educational organization more loyally behind it than the North Central Association of Colleges and Secondary Schools. In fact that Association officially took cognizance of the new unit in our school system at a very early date in its history. As early as 1918 it attempted to guide the advance of the young hopeful by defining in somewhat general terms what it considered a junior high school to be. A year later it elaborated its statements and took steps to draw up a set of standards by which to evaluate the new unit. Its further purpose at that time was to prepare and publish a list of institutions that met these standards.

Before any definite action was taken to carry out its proposals, the Association reversed its judgment. After prolonged discussion the opinion prevailed that any attempt at the standardization of junior high schools that early in their development might prove more harmful than helpful; it might check experimentation and desirable growth. Consequently the proposed plan for publishing a list of approved schools was abandoned.

Nevertheless the Association has never lost interest in the work and the progress of this school unit. Even within the last two years it has exerted its powerful influence to get colleges and universities to adopt plans of admission that shall leave the junior high school entirely to itself; shall, in fact, base requirements for entrance solely upon the work done in grades ten, eleven, and twelve, provided the educational system in question organizes its secondary school

work in two distinct units. Moreover the roster of the Association is studied with the names of men who have been (or are) prominent in furthering the junior high school movement. Among these names are those of Judd, Johnston (C.H.), Newlon, Gosling, Stout, Reed, Childs, Koos, Miller (E. L.), Hanna, Reavis, Tryon, Hudelson, Ryan, and others. A goodly number indeed!

In view of the interest manifested by the Association in the junior high school it is natural that it should likewise be interested in the training provided for junior high school teachers by our colleges and universities. Specifically it rightfully asks the question, Should a distinctive training curriculum for such teachers be established?

In order to determine what are the views of school administrators throughout the United States respecting the matter the following study had been made. It is a companion study of one reported in the NORTH CENTRAL ASSOCIATION QUARTERLY for January. That investigation, however, was concerned solely with the practices and the views of directors of teacher training in a limited number of colleges and universities. The present study sought to elicit the views and to secure facts respecting policies from practical school administrators only.

Altogether there are in America today 23000 or more public secondary schools. Of these 1500 are clear-cut junior high schools, 1500 are combined junior-senior high schools and 1200 are independent five-year and six-year high schools. In

Michigan (to take one commonwealth as a specific illustration) the types are similar to those found in the country generally. According to the latest statistics of that state there are at present 51 North Central accredited five-year and six-year high schools and 47 North Central accredited three-year senior high schools. Each of the three-year senior high schools presupposes one or more junior high schools within the same system. Indeed the *Michigan Education Directory* for 1933-1934 gives the number of such schools as 133.

All of these reorganization efforts on the junior high school level have come about in response to the demands of a comparatively new educational theory. This theory holds that youths of the early pubertal stage are notably unlike the pupils of the grades below and of the grades above. They differ from them in intellectual interests, in emotional reactions, and in volitional responses. Dr. Crampton has well summarized the facts of pubertal changes when he says:

New mental abilities appear, while others disappear; the type of play changes; new companions are sought; new likings, tendencies, enthusiasms and emotions make up the whole of life. Old land marks of life fade and new ones are eagerly sought . . . the pubertal change leaves the child a wholly different being—different mentally, physically, morally and ethically from children in the state just left behind.¹

Dr. Judd has likewise set forth the significance of the period when he says:

There is ample educational justification for separating pupils of different levels of maturity. The argument that education is continuous is an argument that flies directly in the face of psychological fact. Pupil development is not continuous in the sense that the successive stages of such development are alike. The infant has one kind of mind and needs one kind of educational treatment; the high school pupil is at a wholly different stage of maturity

and needs a type of treatment appropriate to his age.

"The junior high school period of life is a period of unique intellectual and social demands. Ninth grade pupils are more like pupils in the grades immediately preceding than they are like pupils in the upper years of the high school. . . Human nature from twelve to fifteen years of age is different from human nature from fifteen to eighteen. Human nature calls for a junior high school which is different from a senior high school.²

It is clear, therefore, that the functions of a junior high school are unique. The school is designed to serve as an elaborate preparatory agency for boys and girls—helping them to discover and to test their individual interests, powers and aptitudes, seeking to arouse in them their latent ambitions, endeavoring to reveal to them the multiplicity of activities and occupations which the modern world has to offer them, and aiming to assist them to select careers in life in which they will be both useful and happy. To these ends the junior high school stresses a socializing and a guidance program for all. In its administration it endeavors to develop in its pupils self-confidence, independence, a spirit of openmindedness and inquiry, and the art of cooperating happily and effectively with others. In its curriculum arrangements it concerns itself with instructional materials that tend to yield culture and overviews.

In order to carry through as elaborate a program as these words imply, the junior high school requires teachers that are broadly trained and specifically prepared for the work. This demand in turn places a new responsibility on the teacher training institutions of the land. How are these institutions meeting that responsibility? The study reported in the *NORTH CENTRAL ASSOCIATION QUARTERLY* for January, 1934, gives a partial answer to that query.

¹ C. W. Crampton, *International Congress of Hygiene and Demography*, 1912, Vol. III, p. 228.

² From an address.

In the present study a letter and a questionnaire were sent to the superintendents, principals, and supervisors of instruction in 300 school systems known to have some form of a junior high school incorporated in their educational systems. These schools were located in all parts of the United States, although the North Central States—and particularly the State of Michigan—were canvassed most extensively. Altogether 163 usable replies were received. Of these 62 were from Michigan, 59 from other North Central States, 25 were from the New England and the Middle States, 11 were from the Southern States, and 6 were from the Pacific Coast section. In Michigan every city or town having a junior high school was solicited; outside of Michigan only the larger school systems were approached. The questionnaire which the various officials were asked to fill out contained ten main topics or enquiries. These were as follows:

1. The training at present demanded of junior high school teachers.
2. The experience demanded.
3. The types of academic training favored.
4. The extent of departmentalization employed.
5. The usual subject matter combinations sought.
6. The amount of professional training preferred.
7. The kinds of professional work preferred.
8. The importance attached to certain specifically mentioned non-education courses.
9. The wisdom of having a distinctive training curriculum for junior high school teachers.
10. Personal suggestions respecting the entire problem of junior high school teaching.

Table I gives the summaries of these 163 replies. The first column contains the questions on which data were sought, worded virtually identically with the wordings in the questionnaire itself.

From this table the following generalized statements and conclusions may be drawn. Eighty-three per cent of all the

schools replying demand that a teacher of academic subjects in the junior high school shall be a college graduate, sixty-five per cent demand an individual with previous teaching experience, and eighty-six per cent demand an individual who has specialized in one or more fields of academic learning. Furthermore there are no very significant departures from these percentages when specific sections of the country are considered separately. The one conspicuous deviation is found in Michigan in respect to the requirement for previous teaching experience. Here only sixty-one per cent of the officials set such a standard, while an average for all the schools is sixty-five per cent and for the North Central States other than Michigan, sixty-seven per cent. The explanation for these differences is that in Michigan *all* types of junior high schools were included, while elsewhere the schools in fairly large systems were alone considered.

Question two, with its three parts, yielded some surprising figures. Thus sixty-seven per cent (sixty-six and two-thirds per cent to be exact) of the officials declare that "other things being equal" they prefer to secure their junior high school teachers from teachers colleges rather than liberal arts colleges; exactly the same number prefer a junior high school teacher with previous teaching experience in an elementary school; and more than half (fifty-five per cent) prefer a junior high school teacher who has minored to the extent of at least fifteen semester hours in three or four teaching subjects rather than one who has majored in one subject and minored in one other subject. Here again Michigan's percentages run slightly higher than the common averages, due perhaps to the same causes that were mentioned in respect to division number one.

It will be noted by referring to the table that a small number (averaging

TABLE I

SUMMARIES OF 163 REPLIES FROM JUNIOR HIGH SCHOOL ADMINISTRATORS AND SUPERVISORS
RESPECTING THE TRAINING OF JUNIOR HIGH SCHOOL TEACHERS

QUESTION	MICHIGAN	OTHER NORTH CENTRAL STATES	WESTERN STATES	EASTERN STATES	SOUTHERN STATES	TOTALS
<i>Number of replies</i>	62	59	6	25	11	163
1A. Do you demand a college Graduate?						
Yes	55	47	5	21	8	136
No	7	12	1	4	2	26
Equivocal or not answered	0	0	0	0	1	1
1B. Do you demand previous teaching experience?						
Yes	37	40	6	17	6	106
No	20	19	0	7	5	51
Equivocal or not answered	5	0	0	1	0	6
1C. Do you demand specialization in one or more fields of academic training?						
Yes	53	52	6	21	8	140
No	6	7	0	3	2	18
Equivocal or not answered	3	0	0	1	1	5
2A. Other things being equal do you prefer a graduate of						
A Liberal Arts College	13	15	2	12	2	44
A Teachers College	41	44	4	12	7	108
Equivocal or not answered	8	0	0	1	2	11
2B. Do you prefer an individual with previous teaching experience						
In Elementary School	40	40	5	15	8	108
In High School	8	8	0	5	3	24
In Junior High Schools or other type of school	14	11	1	5	0	31
2C. Do you prefer an individual who has Majored in one academic subject and in one minor subject (15 hours)	21	26	3	12	5	67
Minored in three or possibly four subjects (15 hours each)	36	33	3	12	6	90
Equivocal or unanswered	5	0	0	1	0	6
3. Would you favor requiring each prospective junior high school teacher of an academic subject to have at least 15 hours in each of the following four fields: English, Social Studies, Science, Art.						
Yes	38	31	4	17	10	100
No	12	18	2	4	1	37
All but Art	10	10	0	4	0	24
Unanswered	2	0	0	0	0	2
4. Does a typical teacher in your school teach						
In a single field of instruction ..	42	42	0	13	6	103
In two or more fields of instruction	19	17	1	12	2	51
Equivocal or unanswered	1	0	5	0	3	9

TABLE I (Continued)

QUESTION	MICHIGAN	OTHER NORTH CENTRAL STATES	WESTERN STATES	EASTERN STATES	SOUTHERN STATES	TOTALS
5. Should a junior high school teacher be expected to have more work in Education than a senior high school teacher?						
Yes	20	13	2	6	4	45
No	31	46	4	19	7	107
Equivocal or unanswered	11	0	0	0	0	11
6. Which of the following courses in Education (usually two semester hours each) do you think <i>all</i> prospective junior high school teachers should be expected to pursue in college? (Do not check more than 10 or 12 giving a total of 20 to 24 semester hours.)						
a. Educational psychology (Checked)	58	56	6	24	10	154
b. Orientation in Education (Checked)	25	22	2	10	4	63
c. Principles of Teaching (Checked)	56	50	5	24	10	145
d. The Junior High School General Course (Checked)	58	57	6	22	10	153
e. History of Education in Modern Europe (Checked)	14	5	1	6	1	27
f. History of Education in the United States (Checked)	37	31	4	14	6	92
g. Extracurricular Activities in the Junior High School (Checked)	51	54	4	24	10	143
h. School library work (Checked)	13	11	1	2	5	32
i. Mental Hygiene of Adolescence (Checked)	59	50	5	19	9	142
j. Principles of Educational and Vocational Guidance (Checked)	52	41	5	20	8	126
k. School Management (Checked)	9	22	3	10	1	45
l. Psychology of Exceptional Children (Checked)	29	30	1	7	4	71
m. Mental Measurements (Checked)	34	32	3	18	6	93
n. School Hygiene (Checked)	22	22	0	5	4	53
o. Educational Sociology (Checked)	36	23	3	18	4	84
p. Special Methods (Checked) ..	25	31	4	10	3	73
q. Directed Teaching (Checked)..	43	34	6	15	7	105
7. Would you vote to have <i>all</i> teachers in the junior high school have at least one course in						
a. Heredity						
Yes	37	17	0	10	0	64
No	19	30	4	11	7	71
Equivocal or unanswered	6	12	2	4	4	28
b. Sociology						
Yes	49	47	5	10	7	118
No	8	5	0	11	2	26
Equivocal or unanswered	5	7	1	4	2	19
c. Introduction to Philosophy						
Yes	29	24	3	19	5	80
No	17	15	1	3	2	38
Equivocal or unanswered	16	20	2	3	4	45

TABLE I (Continued)

QUESTION	MICHIGAN	OTHER NORTH CENTRAL STATES	WESTERN STATES	EASTERN STATES	SOUTHERN STATES	TOTALS
<i>d. Music Appreciation</i>						
Yes	16	18	3	4	5	46
No	25	17	1	15	4	62
Equivocal or unanswered	21	24	2	6	2	55
<i>e. Speech Training</i>						
Yes	35	37	3	12	2	89
No	12	10	1	9	2	34
Equivocal or unanswered	15	12	2	4	7	40
<i>f. Organic Evolution</i>						
Yes	17	10	2	4	1	34
No	24	21	1	13	3	62
Equivocal or unanswered	21	28	3	8	7	67
<i>g. Dramatics</i>						
Yes	18	16	3	6	3	46
No	27	18	0	11	3	59
Equivocal or unanswered	17	25	3	8	5	58
<i>h. Drawing</i>						
Yes	13	13	3	1	2	32
No	31	20	1	14	3	69
Equivocal or unanswered	18	26	2	10	6	62
8. Do you personally favor the idea of having a distinctive training curricu- lum for junior high school teachers?						
Yes	40	45	4	15	10	114
No	19	9	1	9	1	39
Equivocal or unanswered	3	5	1	1	0	10

ro for each question) did not record their views on the three queries. Moreover some individuals voted but qualified their replies briefly. Thus, one superintendent wrote, "I do not think question 2A is a sensible question." Another, referring to the same question, said, "It all depends on the school." Two others replied, "There is no choice; we can soon train them to fit our needs."

Possibly question 2A was not a sensible one to ask. However, when only 44 school administrators out of 163 go on record as favoring liberal arts college graduates over teachers college graduates there must be some good reason for the choice. It would behoove liberal arts colleges to find out what these reasons are.

As to what kind of previous teaching experience is preferred for junior high school teachers, 13 officials specifically

said "junior high school experience," indicating apparently that they are accustomed to go to other schools of like character to secure their teachers. Three superintendents definitely expressed a preference for previous rural school experience for their junior high school teachers, saying that such teachers were apt to be much more in sympathy with pupils than other teachers are. A number of officials made clear the fact that almost any previous teaching experience was satisfactory to them provided it had not been secured in a senior high school, many of these writers saying very frankly that such teachers, although successes in the senior high school were likely to prove failures in the junior high school. They are, say they, too likely to be "academic minded" rather than "child minded." Finally, Assistant Superintendent A. C. Eldridge of Cleveland,

Ohio, seemed to summarize the views of a considerable number of administrators when he wrote, "I personally would rather have a teacher with good knowledge of the subject and do the training ourselves." Superintendent Otto Haisley of Ann Arbor, Michigan, also states what apparently is the practice of many officials when he says: "We have followed different practices in respect to these matters. We have put more stress upon obtaining a resourceful teacher and less on just how that resourcefulness has been acquired." Not a few superintendents also expressed the wish that junior high school teachers shall have had practical contacts with the business world and with what at least one individual styled "non-school people."

That fifty-five per cent of all the administrators who replied to the questionnaire prefer to have junior high school teachers who have spread their academic preparation to the extent of at least fifteen semester hours in each of three (or possibly four) distinct fields of knowledge rather than to confine their work largely to one or two fields of specialization is truly significant. Superintendents and principals apparently fear the narrowing and dehumanizing effects of intense concentration for junior high school teachers. Not that these administrators love deep learning less but they do love the junior high school boys and girls more.

Question three was a supplementation of question 2C. It enquired whether officials would favor *requiring* all junior high school teachers to have completed at least 15 semester hours in each of the four fields of English, Social Studies, Science, and Art. Here the vote stood 100 yes, 37 no, 24 yes excluding Art, and 2 equivocal or blank. That is sixty-one per cent would favor the proposal as written. Another 14.7 per cent would favor it if Art were omitted from the

prescribed list, while twenty-four per cent would reject the plan in toto.

Here again the votes were often accompanied by explanatory words. Thus one says, "Too formal." Another says, "In our school teaching is limited to two fields at most; 15 hours in each of these four fields are too many." Another wrote, "Desirable but not demandable under present conditions." Another replied, "I vote no because such an amount might prevent me securing a very desirable candidate who lacks one of the requirements."

Reading between all the lines it is apparent that most administrative officers would welcome the four-field minor achievement but hesitate to set up the ideal as an absolute requirement for all teachers. Indeed many of them would make as extensive a requirement as was suggested in the questionnaire but would change the content somewhat. For example, ten officials specifically mention mathematics as a subject that should be required of all; six specifically listed training for extra-curricular activities; three included guidance and auditorium work; while one or more mentioned health, commercial work, public speaking, and certain other subjects.

In 103 of the 163 schools reporting a typical high school teacher teaches in but a single field of instruction. This is sixty-three per cent of all. In Michigan, however, the number runs as high as sixty-nine per cent; in the 25 Eastern States reporting it is as low as fifty-two per cent. Whether these divergencies are due to preferences in administration or to circumstances over which the authorities have little or no control is not evident. It seems clear that the smaller the school system the more likelihood there is that each teacher will be called upon to teach in more than one department of learning. In the large systems or in the large schools the opposite is true.

Question five on the questionnaire asked what combinations of subjects of instruction were found to be most desirable. The answers to the query were so variable that it was not deemed wise to compile them. Consequently the data from this question are omitted from the table given here. In general, it may be said that the returns indicate that every combination conceivable is found in the various schools and that for many administrators at least the matter is one of total indifference. Thus Assistant Superintendent P. B. Clemens of Milwaukee wrote: "No combination of subjects needs to be prescribed. A junior high school program is sufficiently flexible to give teachers their best combinations." The respondent from Michigan City, Indiana, said, "The combination of subjects is rather immaterial; can easily schedule to fit interests."

On the other hand it is evident that many of the smaller school systems do not find the problem as easy of solution. Here certain types of combinations were mentioned much more often than others. Thus it appears that English and the Social Studies and English and a foreign language (Latin or French) constitute combinations that are common. Likewise mathematics and science, mathematics and commercial work, and (less often) mathematics and physical education frequently go together. Aside from these trends there appears to be little rhyme or reason to the arrangements affecting subject combinations. Nevertheless, considering this question in conjunction with some of the other questions asked, it is apparent that a candidate who has *some* combination of teaching subjects—and preferably also more than one set of combinations—stands a better chance for consideration as a teacher in many junior high schools than does the individual who lacks such possibilities for flexible adjustments.

Should the junior high school teacher be expected to have completed more work in education than a senior high school teacher? This was question number seven on the enquiry form. Of those voting 107, or 65.6 per cent, say no; 45, or 27.6 per cent, say yes; while 11, or 6.7 per cent, neglected to answer the question. Some of the comments made are as follows: "The training should be different but not necessarily greater in extent." "All teachers need more professional training than they get." Or, on the negative side, "All teachers get more professional training than they need before they begin to teach; let them get most of the professional training *in service*." Finally, "Teacher training institutions have overdone the idea of professional training."

Taking the data as a whole it appears that administrators are reasonably well satisfied with the amount of professional education their junior high school teachers receive but they are less well pleased with the kinds of instruction given them.

Question number eight on the enquiry form (number six in the table) sought to learn just what aspects of Education or professional work administrators deem to be the most important for junior high school teachers. Perhaps none will be surprised that Educational Psychology, The Junior High School (general course) and Principles of Teaching rank at the top of the list of preferred subjects. Indeed, these three courses have almost a unanimous vote of the officials.

The next three subjects in order of mentioning are Extracurricular Activities, Mental Hygiene of Adolescence, and Principles of Educational and Vocational Guidance, these courses having respectively 143, 142, and 136 votes out of a possible 163 votes. Directed Teaching stands seventh on the list of courses, having a total of 105 votes. Why this

subject should fall notably below some of the others in the estimation of the authorities is not clear. Possibly, since many administrators require actual teaching experience in other grades or systems before they elect junior high school teachers, that experience may be thought to make Directed Teaching in a training institution superfluous for them.

There are, however, still more surprising facts revealed by the table. Thus, only 27 of the 163 individuals expressing an opinion voted in favor of a course in the History of Education in Modern Europe; only 32 seem to think any training in Library Work is necessary for junior high school teachers; only 45 consider School Management of sufficient importance to include it in a prescribed list of courses; and only 53 deem School Hygiene worthy of a place among the required subjects. Further, only 40 to 60 per cent of the voters give their unqualified approval to such courses as Mental Measurements, History of Education in the United States, Educational Sociology, Special Methods, the Psychology of Exceptional Children, and Orientation in Education—these courses being listed here in the order of their significance.

There was naturally little or no objection taken to any of the specific courses listed in the questionnaire. The difficulty came in discriminating among them. The directions given requested that not more than ten or twelve checkings should be made by any one, so that the total choices (on a two semester hour basis for each course) would represent a total of from 20 to 24 semester hours credit. Most of the checkers complied with this request.

Here, as elsewhere, some individuals were not satisfied merely to mark the ballot but attempted to give reasons for their selections or advice respecting the

whole matter. The suggestion that was made most frequently was that something from all the courses mentioned should be given but that the work should be organized differently. Some would have only four or five required courses and have each of these carry three or four semester hours credit. Thus, one individual wrote, "I do not like the idea of two hour courses. Why cut the offerings into so many parts? Why not combine, for example, the History of Education in Europe with the History of Education in the United States, Orientation topics with Principles of Teaching, and the Psychology of Exceptional Children and Educational Psychology in general with Special Methods?"

Other individuals, however, appear to be entirely satisfied with two hour courses for a portion of the requirements but prefer four hour courses for such work as Educational Psychology, Directed Teaching and perhaps one or two other combination subjects.

Question nine on the enquiry form (question seven in the table) sought to elicit administrators' views respecting certain quasi-professional courses in much the same way that the previous question dealt with strictly educational work. There was a feeling on the part of the sponsor of the enquiry that the subjects of Heredity and Organic Evolution were basic to work in Educational Psychology in all of its many aspects; that Sociology and Philosophy were cognate to the History and Principles of Education; and that Music Appreciation, Speech Training, Dramatics and Drawing were powerful handmaidens in the activities of every junior high school teacher. The returns from the questionnaire throw doubt upon most of these preconceptions.

Of the eight types of work mentioned Sociology is the only one that meets with any pronounced favor by the groups of

administrators consulted. Of the 163 replying, 118, or seventy-two per cent, would include the subject as a required course in the curriculum of the junior high school teachers. Of the remainder, 26 would disapprove the course entirely and 19 others by their neglect to vote, would apparently leave the matter to chance.

Ranking second in favor among the eight subjects mentioned stands Speech Training, but even this polls only 89 votes, or 54.5 per cent of all. Here, too, there were some positive opponents and some fence-sitters, 34 individuals voting no on the proposal and 40 ignoring the question completely.

A course in the Introduction to Philosophy fared no better. Here only 80 were entirely friendly to its inclusion, 38 would positively reject it and 45 others would reject it by implication.

Nevertheless the three courses mentioned above had a long lead over the other five subjects listed in the enquiry form. For a course in Drawing, only 32 positive votes were cast and for a course in Music Appreciation and a course in Dramatics only 46 approving ballots were recorded. And yet, as stated before, all three of these departments of instruction represent types of work that receive much attention in a junior high school. The only plausible explanation for their omission from a general training curriculum is that they concern special interests and that teachers who must handle work of these sorts will be specifically trained to perform it.

But the surprise of the entire investigation relates to the proposals to include courses in Organic Evolution and Heredity in the junior high school training curriculum. Although the questionnaires returned abound with references to the need for teachers to be students of adolescence and their psychology, only 34 administrators see any reason

for including a course in Organic Evolution in the training curriculum and only 64 would support the idea of a course dealing with Heredity. On the other hand 62 would positively reject the first named subject and 71 would reject the second, while the numbers not voting in the two instances are respectively 67 and 28.

Table II sets forth the favoring attitudes by groupings and by totals. It shows in percentages to the nearest decimal place, how the different geographical sections view the matter. Thus, Michigan leads in the percentage of administrators favoring a course in Heredity, the Western States lead in the percentage of administrators favoring a course in Sociology, the Eastern States are relatively strong for a course dealing with Philosophy, the North Central States stress Speech Training more than the others, while the Western States again forge to the front in their advocacy of the remaining three subjects. Perhaps, however, this table has little real validity, since the Western States and the Southern States are represented by such relatively small numbers of respondents.

In all probability the small support received by any of the eight subjects listed was due not to the fact that administrators were prejudiced against them but that the questionnaire set up the proposal that *all* teachers should be *required* to pursue them. Nevertheless the returns give food for thought.

The last item on the questionnaire asked categorically whether the individual filling out the blank favored or did not favor a distinctive training curriculum for junior high school teachers. Space was also allowed for writing in the reasons for his judgement. Table III gives the returns on this question. It shows that 51 superintendents, assistant superintendents and other educational officials with general city-wide

interests and duties favor the adoption of such a curriculum, while 23 officials of these kinds disapprove. Further, the table shows that 63 out of 79 principals of junior high schools or of six-year high

Louisville; Dallas and San Antonio, Texas; Dayton, Cleveland, and Cincinnati, Ohio; Minneapolis; Kansas City (Missouri); Long Beach, California; Spokane and Tacoma, Washington; and

TABLE II
VOTES IN FAVOR OF INCLUDING CERTAIN SPECIFIC SUBJECTS IN THE TRAINING CURRICULUM OF THE JUNIOR HIGH SCHOOL TEACHERS (IN PERCENTAGES)

SUBJECT	MICHIGAN	OTHER NORTH CENTRAL STATES	WESTERN STATES	EASTERN STATES	SOUTHERN STATES	TOTALS
<i>Replies</i>	62	59	6	25	11	163
1. Heredity	60	30	0	40	0	39
2. Sociology	62	80	83	40	64	72
3. Introduction to Philosophy	47	40	50	76	45	49
4. Music Appreciation	26	30	50	16	45	28
5. Speech Training	56	63	50	48	18	55
6. Organic Evolution	27	17	33	16	9	20
7. Dramatics	27	27	50	24	27	28
8. Drawing	21	22	50	4	18	20

TABLE III
CATEGORICAL JUDGMENTS OF 163 ADMINISTRATORS RESPECTING THE WISDOM OF PROVIDING A DISTINCTIVE TRAINING CURRICULUM FOR JUNIOR HIGH SCHOOL TEACHERS

<i>Favoring</i>	
1. Superintendents, assistant superintendents, and directors and supervisors with city-wide interests	51
2. Principals of junior high schools, and of six-year high schools	63
Total favoring	114
<i>Not Favoring</i>	
3. Superintendents, assistant superintendents, and directors and supervisors with city-wide interests	23
4. Principals of junior high schools and of six-year high schools	16
Total not favoring	49
5. Equivocal or not answering	10
Grand Totals	163

schools approved the plan. Ten respondents only were equivocal in their answers or neglected to reply to the question. The Michigan contingent voted approximately seventy per cent favorable to the plan.
Among the cities in which the distinctive curriculum was favored by the general administrative officials replying are: Boston; Philadelphia; New York; Baltimore; Richmond (Virginia); Atlanta;

(within Michigan) Detroit, Saginaw and Bay City.
Among the cities in which the distinctive curriculum was not favored by the general administrative officers replying are: Lynn and Somerville, Massachusetts; Providence, Rhode Island; Newark, East Orange and Jersey City; New Jersey; Altoona, Pennsylvania; South Bend, Indiana; Milwaukee, Wisconsin; St. Louis, Missouri; Salt Lake City,

Utah; and (within Michigan) Ann Arbor, Grand Rapids, Lansing, Flint and Pontiac. Speaking generally the South and West were decidedly for the plan; the other sections much divided in opinion.

Many individuals took the opportunity to give reasons why they favored or did not favor the plan suggested. For the most part these statements were brief and much alike. The affirmative group held that the junior high school is a unique unit in our school system, with problems decidedly different from the other units. Hence there is need, said they, for a kind of teacher training that is different.

The opponents took almost a diametrically opposite view, namely that the school system is a unit, that the problems of the junior high school are certainly much like those of the senior high school, and that it is narrowing and unnecessary to provide a different type of training for different groups.

Clearly there are two sets of philosophy operating to determine the character and function of secondary education in America.

Some of the longer comments made in favor of a distinctive curriculum are as follows:

Principal L. W. Brooks, Wichita, Kansas: I think the junior high school has a function all its own; it also has a distinctive psychology and should have a distinctive method. I favor a distinctive training curriculum for its teachers.

Superintendent L. A. Butts, Bellville, Illinois: In my opinion the junior high school is the hardest place in any type of school to teach. Teachers must know where they are to teach and what they are to teach. A distinctive training curriculum will help.

Assistant Superintendent J. L. Shouse, Kansas City, Missouri: In my opinion the junior high school is likely to make a greater contribution to American Education in the next fifteen or twenty years than any other sector of our educational field. If that contribution is to be what it should be it will be the work of people who believe in and are interested in

the peculiar problems of the junior high school. At present too many teachers apply for work in the junior high school hoping thereby to gain entrance to the senior high school. I am interested in candidates who want to work (permanently) in the junior high school. I favor a distinctive curriculum for their training.

Principal H. A. Latta, Webster Groves, Missouri: Junior high school teaching is **not** merely a step to other teaching. Teach young men to see the educational opportunities that lie in dealing with this age of the child.

Assistant Superintendent H. J. Linton, Schenectady, New York: I vote for a distinctive curriculum because no new teacher has the proper vision of the purpose and work of the junior high school at the present time.

Director of Personnel W. A. Justice, Cincinnati, Ohio: Too many junior high schools are departmentalized 7th, 8th, and 9th grades. The underlying philosophy of the junior high school is either not known or is forgotten:

Principal R. E. Redmond, Pueblo, Colorado: It has been my experience that teachers taken from the elementary school or the senior high school fail for some time to fit into the scheme of things in the junior high school. The result is a junior high school in name only.

Superintendent J. G. Moore, Fargo, South Dakota: The junior high school is a distinctive institution. The attempt of the North Central Association to treat it as a secondary school is a serious blunder.

District Superintendent Assigned to Junior High Schools, Benjamin Veit, New York City: I approve a special curriculum in order that teachers may become acquainted with the special needs of the early adolescent and to know the special methods necessary at this school level.

District Superintendent L. V. Stockard, Dallas, Texas: To be successful a junior high school teacher must know the purposes of the junior high school, have a sympathetic understanding of the problems of adolescence and must be able to correlate the work with all other departments of the system.

Principal J. G. Scott, Petersburg, Virginia: Yes, I favor a distinctive training curriculum for junior high school teachers because neither the teacher in the elementary school nor in the senior high school seems to realize what type of child the junior high school pupil is. The one frequently thinks him as *still* tied to his mother's apron strings and needing constant direction as well as supervision; the other frequently overrates his stage of develop-

ment and expects a greater degree of self-control than he possesses.

Assistant Superintendent C. C. Ball, San Antonio, Texas: I decidedly favor a distinctive training curriculum for junior high school teachers. There are altogether too many so-called junior high schools in the country which have been organized and taught by people whose idea of the purpose and nature of the junior high school is exceedingly hazy. As a result these schools are junior schools in name only. In spirit and in essence they are merely a combination of grades seven, eight, and nine. Their course of study, their method, and their activities are changed little, if any, by the fact that they are called junior high schools. Every state university should do what you are planning to do, so that teachers, supervisors, and administrators may be trained in the spirit, the philosophy and the psychology of the junior high school. Only when this is done will the junior high school really come into its own.

Assistant Superintendent H. F. Hunt, Tacoma, Washington: I favor a distinctive curriculum although much training should be common to both junior and senior high school teachers.

After all is said and done teachers are dealing with growing, changing, developing boys and girls. To deal with them understandingly, sympathetically, justly, sincerely is the *sine qua non*. Academic training there must be; subject techniques are essential, indispensable in fact. *But* subjects do not make a teacher. Every teacher should be confronted with the question "Are you primarily interested in academic subjects or in boys and girls." If they are primarily interested in the former then "Outside the gate with them."

Assistant Superintendent Arthur Gould, Boston, Massachusetts: I favor a distinctive training curriculum for junior high school teachers because it requires a special training to do effective work with adolescent children.

Superintendent L. W. Smith, Berkeley, California: I favor a distinctive curriculum because the particular objectives of the junior high school are not attained as well as they should be and this is due to the fact that junior high school teachers do not understand them.

Principal Anne L. Force, Denver, Colorado: Yes, because the junior high school period is a time of mental and physical change which needs understanding and sympathy. At no time in a child's life is more careful guidance needed, such as health, educational, and social.

Principal G. A. Thompson, Benton Harbor, Michigan: It is almost impossible to find teachers who are well prepared to work in the junior high school. A distinctive training curriculum for junior high school teachers is very much needed and I should certainly like to see one introduced at the University of Michigan.

Principal A. B. Haist, Saginaw, Michigan: One of our real difficulties is to get teachers who understand and appreciate the problems of adolescent youth.

Principal F. D. Radford, Menominee, Michigan: Our biggest problem is to find teachers who appreciate the problems of our slow pupils and also can make the brilliant ones really work.

On the other hand (and negatively speaking) one reads other views, such as these:

Principal R. Ready, Alton, Illinois: There has been no concrete evidence that such a course or curriculum as suggested would be distinctive. None other than Dr. Briggs makes his course for the junior high school over from high school materials.

Superintendent J. G. Rossman, East Chicago, Indiana: I question any training that gives the teacher the impression that she can teach only one subject on a particular grade level.

Assistant Superintendent P. B. Clemens, Milwaukee, Wisconsin: We regard the junior high school as a suitable proving ground for future high school teachers. The more static senior high school needs the leaven of the junior high school idea.

Principal G. L. Jones, Terre Haute, Indiana: In my opinion the teaching in the junior high school is not different enough to justify an entire curriculum.

F. J. Jones, West Allis, Wisconsin: I do not see much excuse or reason for not including the same training for both junior and senior high school teaching.

Assistant Superintendent H. D. Pearl, Burlington, Vermont: I do not feel that a junior high school can justify its existence as a separate unit. It is in many ways an educational extravagance. It has its place only as an integrated part of the system and emphasis should be placed on the system as a whole and not on a particular division of it.

Assistant Superintendent W. P. Sweet, Somerville, Massachusetts: I am becoming of the opinion that we are segregating our instruc-

tion too much; that we are dividing our subjects arbitrarily and then discuss integration; that we have lost our perspective by the division of the subject matter into small units and that this causes many difficulties that cannot be explained.

Supervisor of Secondary Schools C. H. Woodruff, Long Beach, California: No, I do not favor a distinctive curriculum. The training for junior high school teachers should be much the same as for senior high school teachers. There should be little break between the two schools. If teachers are trained in distinctive fashion the results upon the pupils are confusing as he goes from one group to the next. Senior high school teachers need more training in teaching, less in purely subject material. They need to learn the pupil before they attempt to teach him.

Principal W. A. Sargeant, Rutland, Vermont: The laws of learning are probably not different for children 12 to 15 than for others. The distinctive features of a teacher training course for junior high schools should be toward an understanding of the physical and mental development at the early adolescent stage. The difference between the successful and the unsuccessful teacher in junior high school is less often the result of poor teacher training than it is the lack of proper personality elements. In a junior high school training course care should be taken to keep out those folks who have no sympathy with or understanding of the problems of adolescent boys and girls.

Principal W. H. Smith, East Orange, New Jersey: I disapprove of a distinctive curriculum for junior high school teachers. They must not become class conscious. Their work is transitional.

Principal O. J. Robinson, Hamtramck, Michigan: No, a properly trained elementary teacher is usually an excellent junior high school teacher.

Principal G. E. Downs, Grand Rapids, Michigan: I oppose because educational foundations are universal.

Superintendent L. A. Butler, Grand Rapids, Michigan: No, I do not favor. We have six-year high schools and make vertical assignments. Some of our best high school teachers—in fact, most of them—have had training for and experience in the top elementary grades, i.e., grades five and six.

Superintendent Otto W. Haisley, Ann Arbor, Michigan: I question the advisability of setting up a distinctive teacher training curriculum for prospective teachers in the junior high school. I see no reason why the lines

should be so distinctly drawn between different levels of instruction in the public schools. I should dislike to see the time come when we have an elementary school teacher guild, a junior high school teacher guild, or a senior high school teacher guild.

Finally, a certain few individuals set forth briefly their views respecting the entire question of teacher training—particularly for teachers in junior high schools. Some of these may, in conclusion, be quoted.

Principal L. W. Brooks, Wichita, Kansas: In the training school every teacher should be required before graduation, (1) to state in writing his philosophy of education and a few facts from his philosophy of life, and (2) to pass a course which might be called "Securing and maintaining an agreeable disposition."

2. Principal L. V. McDonough, Dubuque, Iowa: Academic knowledge and familiarity with educational procedures are not enough. Temperament and disposition are important considerations in a junior high school teacher.

Principal L. E. Luberg, Madison, Wisconsin: My first requirement of a junior high school teacher would be one who is human enough to appreciate the many trying situations that can confront an adolescent child; my second requirement would be mastery of subject matter.

Superintendent J. A. Nugent, Jersey City, New Jersey: The one difference in the training of junior and senior high school teachers should be in the subjects of specialization. Both should be familiar with all the factors that enter into the lives of high school boys and girls. They should be able to handle cases of maladjustment as they arise and assist in the handling of cases that require the aid of the specialist—as psychiatrist, psychologist, physician.

Principal H. D. Morrison, Trenton, New Jersey: I would consider instruction in the following fields absolutely essential to the professional training of a junior high school teacher: (1) general methods, (2) the general field of secondary education, (3) junior high school theory and practice, (4) special subject methods, (5) guidance, (6) extra-curricular activities, and (7) practice teaching.

Deputy Superintendent Ernest Stephens, Lynn, Massachusetts: In our system junior high school teachers frequently become senior high school teachers. The only barrier between

the two groups is a salary situation. I should like to remove this artificial element and consider teachers trained to do secondary school work, placing them in the six grades where they could do their best.

Principal W. H. Smith, East Orange, New Jersey: The chief lack of junior high school teachers, as I see it, is a sound education, a wide interest in general knowledge, a fresh and independent outlook, and an adequate realization of the immense significance and wide complications of education in a democratic society.

Assistant Superintendent J. H. Linton, Schenectady, New York: Teachers should be trained in problem solving. They should be led to value subjects less and pupils' reactions and thoughts more.

Assistant Superintendent C. V. Bush, Jamestown, New York: Junior high school teachers (as well as all others) should be trained to recognize the fact that the end of education is not the acquisition of knowledge—that 19th century methods will not meet 20th century problems. Too many teachers are one generation in arrears.

Principal G. W. Morris, Boonville, Missouri: A teacher who is transferred from an elementary school or a senior high school does not usually understand the problems of the junior high school. . . . We who are connected with junior high school need to get away from the traditional high school training.

Assistant Superintendent A. C. Eldridge, Cleveland, Ohio: I think the most helpful thing the teachers colleges can give a teacher-to-be is a wholesome comprehensive philosophy of education, which is in reality a philosophy of life. Add to this the knowledge of subject matter and leave the training to the schools where it is real and not superficial.

Principal L. A. Betts, Belleville, Illinois: The possession of good horse sense, a willingness to be supervised, and a desire to do the most in the job usually gets a teacher farthest. If they know their stuff, I feel a superintendent or principal can bring them out.

Principal Cloyd Anthony, Bloomington, Indiana: The first concern of teacher training institutions should be some positive or negative method of selecting prospective teachers who are distinctly superior in native ability and who have a genuine interest in education.

Principal W. E. Coon, Erie, Pennsylvania: Throughout the courses in education the relations existing between elementary, junior high and senior high school should be continuously shown, discussed and emphasized. Many of

the courses should be opened to all through divisions of the public school program for a healthy understanding and interchange of ideas, so as to avoid any tendency for any unit to get itself off in a corner.

Superintendent J. B. Moore, Fargo, South Dakota: The content of a distinctive junior high school training curriculum should be so organized that it will appeal to the types of personalities that are distinctively suited to junior high school activities. The chief objective must be the development of attitudes that will insure the carrying on of the work of the junior high school as an integral part of the system and not merely as a preparatory department leading to the senior high school.

Principal R. P. Redfield, Davenport, Iowa: Higher educational institutions have failed to help would-be teachers find out whether they are adapted by temperament and personality for the work they would attempt. One of the biggest tragedies in the junior high school is the teacher with much more than adequate mental training but temperamentally unsuited for the work because of many reasons. Such as failure to understand children, lack of sympathy for children, fear of children, and a personality that is unattractive to children.

Director of Secondary Education Mary J. Popplewill, Beaumont, Texas: My idea would be to train teachers as broadly as possible so that they may not be afraid to experiment and as deeply as possible so that they may know how to interpret their experimentations.

Superintendent W. A. Greene, Guthrie, Oklahoma: I am afraid we have placed too much emphasis on distinctive training. I have a feeling that we should treat the junior high school more as a part of the whole system and that teachers should be trained more carefully in the whole field of education.

Principal E. T. McSwain, Greensboro, North Carolina: The pupil in a junior high school is passing through a period of physical change and psychological insecurity which may cause him to acquire many negative attitudes and non-constructive habits unless adequate supervision and sympathetic guidance are given. In order to make the advancement for him safe the school's program should be organized and prescribed so that each pupil will have the maximum of opportunities to experience the intoxicating effect of being satisfied and the enjoyment that comes through a sense of social and academic security.

If I were in a position to make requirements for the teacher training program for junior high schools I would require each teacher to pursue

courses in the psychology of adolescence, mental hygiene, recent trends in curriculum revision, and vocational guidance.

Principal Bessie T. Davis, Wyandotte, Michigan: Junior high school teachers should be fitted to carry on activities that help boys and girls to use their leisure time wisely. Call this extra-curricular if you will but to me it is an essential part of each day's work.

Superintendent C. F. Miller, Saginaw, Michigan: Somehow a teacher should have a better understanding of community, business problems, an adaptation to the way people live in actual life. They fail in sympathy and understanding of concrete life situations.

Principal N. W. Chaffee, Saginaw, Michigan: An ideal junior high school teacher comes from

our rural schools, where many grades, ages, and subjects have had to be taught. We decidedly favor the small village administrator-teacher applicant.

Principal L. F. Hire, Pontiac, Michigan: The three fundamentals to me are: (1) an actual semester spent in a junior high school; (2) a general course in curriculum requirements for junior high school; (3) a course in extra-curricular activities.

Superintendent G. L. Jenner, Bay City, Michigan: I want teachers who come here to teach children, each one an individual problem; not teachers who come to teach subjects, thinking they know exactly how it is to be done and "it is just too bad if some children haven't the capacity for it."

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